FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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2119.-Vol. XLVI.

# LONDON, SATURDAY, APRIL 1, 1876.

SUPPLEMENT. | SPRICE SIXPENCE. PER ANNUM, BY POST, £1 46.

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Penstruthal.
Parys Mountain.
Pennant.

Pateley Bridge.
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		Buyers, Se	llers.	1
1	Assheton	£ 11/£	11/4	Pe
ı	Birdseye Creek	134	2	Pe
	Chapel House	3	31/2	Pl
	Devon Great Consols	4	416	Ri
	Dyliffe (Great)	4	5	Ro
	Eberhardt	714	736	Re
	East Caradon	13/	1 1/8	Re
	East Van	101/4	1034	Ba
	Emma		11/2	Sa
١	Exchequer Gold	11/2	15%	80
	Flagstaff	15/8	17/8	Sv
	Glyn	21/2	23/	Ta
	Great Laxey	171/2	181/2	Ti
	Great West Van	10s12		U
	Hingston Down			V
	Javali	8s		VE
	Llanrwst	2	21/	W
	Marke Valley		23/8	W
	North Laxey	198. 6d. 20		W
	New Quebrada		31/2	W
	Old Treburgett	59	78.	W

Buyers. Sellers. £ 2 ... £ 2 ... £ 2 ... £ 2 ... £ 2 ... £ 5 ... 8s. 8s. 10s. 6½ ... 6½ ... 14 ... 14½ ... 18s. 20s. 2s. 9d. 3s. 3d. 1½ ... 2½ oman Gravels... ookhope
ossa Grande
unta Barbara
un Pedro
outh Condurrow
weetland Creek
ankerville 11 ... 17 ... 1¼ ... 39 ... 1 ¼ ... 1 1 ... 1 1 ... 1 1 ... 1 1 ... neroft ..... nity Wood nity Wood
an ......(cum div.)
an Consols
/est Assheton
/est Chiverton
/est Craven Moor
/est Tankerville 10 21/8 11/2 20 12 2 Parys Mountain 14s. 16s. Wheal Crebor 2½. 23½. Parys Mountain 5 5 5½. Wheal Grenville (c, pd.)17s. 6d., 22s.6d. N.B.—Spoal Paris

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50 Great Vor, £2½,

50 Great Vor, £2½,

50 Great Vor, £2½,

50 Great West Van, 11s 3

60 Great West Van, 11s 3

60 Great West Van, 11s 3

60 Cedar Creek, 17s. 64,

60 Exchequer, £1 11s, 31

60 Exchequer, £1 11s, 31

60 Exchequer, £1 11s, 31

60 Exchequer, £2 11s, 31

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## Royal School of Mines.

## PROF. SMYTH'S LECTURES ON MINING-No. XXI.

[BY OUR SPECIAL REPORTER.] The subject of our last lecture—the mode of paying the menalthough apparently very simple, is a very important one, and leads to great difficulties if not thoroughly understood. The arrangements as to payment have to vary, as we saw, according to the conditions of the mine. But there is one point common to both kinds of work—that there is a free agreement on both sides for the men to do a kind of work which is described as accurately as may be at the outset, and it is for their interest, as well as for that of the managers, that it should be done in a given time. It is necessary that rules and regulations should be laid down and adhered to, as, for instance, in sinking or driving that the work should follow a certain definite direction, have a specified breadth, &c.; that the levels should be kept horizontal, or within certain limits of variation. The cases that we looked at particularly were those of our western districts, but the general principles are much the same in other parts. In the North of England the term fathom-tale is applied to the measurement by fathoms, or, in other words, to the tutwork; and if the payment be The subject of our last lecture—the mode of paying the menof England the term fathom-tale is applied to the measurement by fathoms, or, in other words, to the tutwork; and if the payment be on the amount of ore raised the term bing-tale is employed, a bing being the general measure of lead ore in the district, and equal to 8 cwts. In Saxony and Hungary similar methods of payment are adopted. But there are still one or two special points to be noticed. For instance, if a lode contain the metalliferous matter disseminated through it, as is the case with gold and tin, then the work would be by tutwork. There may be, however, places in the lode where, from the presence of nests or strings of ore, it is very much richer than usual. It is undesirable that this richer part should be mixed with the general mass of ore, and then have again to be separated, and a separate bargain is, therefore, made with the men as to such parts. In the Cornish districts it is found advisable to drive the level not in the lode itself, but in the country by the side of it; and this plan is especially desirable in cases where you get a very rich level not in the lode itself, but in the country by the side of it; and this plan is especially desirable in cases where you get a very rich class of work, substances of high intrinsic value, as gold and silver. The level is driven in the country by the side of the lode by one set of men on the tutwork system, and then, when the material from the level is cleared away, the lode itself is broken down from time to time, and collected separately. This is done according to special bargain, either by the same set of men, or by another set, and the lecturer had seen good service done in removing the lodes by employing a set of somewhat better educated youths. In gold and silver workings there is great temptation for the men to pick up pieces of the cre, and it is best not to put this temptation in their way by giving them the whole work to do at once. Another reason for this method is to be found in the fact that in some districts (as in that of St. Just) the lode is of such a character that much more rapid progress can be made in driving through the country by the side. The agreement for taking away the lode will usually be by allowing them so much for every ton, or so many shillings for every pounds worth. It is easy to conceive several circumstances in which it is desirable to adopt some such measure as this.

it is desirable to adopt some such measure as this. it is desirable to adopt some such measure as this.

We may now take a sort of general view of mining operations as they are more or less contrasted with one another, and of the various ways in which they are represented in plans and sections. The general arrangement of working in a colliery or bedded deposit is likely to be very different from that which is usual in metalliferous mines, in consequence of the regularity attached to the one kind of deposit as compared with the other. In the case of a colliery or bedded ironstone deposit, we can at the commencement of the working reckon on its being continued ov r a moderately large area, with sufficient regularity to enable us to calculate beforehand what is likely to be the outbut from a given part. The question is area, with sunceent regularity to enable us to calculate beforehand what is likely to be the output from a given part. The question is only one of a mechanical nature, how best to get at the deposit, and then how best to remove it. But the case is very different when we come to deal with a metallic mine; the workings may be regarded as more or less regular after a time, but during its progress it is to be looked on as only a series of trials and experiments made one after another. In the commencement of such a mine it may one after another. In the commencement of such a mine it may take at first an extremely simple character; as, for instance, the driving in of a level from a hill side, either along the lode or in order to intersect it. Then, when it became difficult to ventilate the end of the level, a shaft should be sunk from the top for this purpose; and levels might then be multiplied and extended, till a second shaft was requisite, when one of these should be employed for pumping, the other for hauling. But if at any time the driving of the levels in different directions show that the workings are not likely to be successful the whole will have to be given up, so that in fact the the other for hauling. But if at any time the driving of the levels in different directions show that the workings are not likely to be successful the whole will have to be given up, so that, in fact, the working resolves itself into a series of experiments, of which those which are unpromising must be abandoned. And this character must be kept constantly in mind in commencing a mine; it is unwise to go to a great expense at once in engines adapted for large depths, &c., but to add these by degrees as the mine establishes itself, taking cars in the outset to introduce, as far as possible, apparatus which may subsequently subserve some secondary purpose. Moreover, in consequence of the irregularity of the deposits, it may be necessary in the case of large workings to have to change the chief seat of operations several times, according to the disposition of the mineral; and, therefore, the probability of this must be considered when setting up appliances in any one particular spot. And in this respect there is great difference from the extensive plant and perfection of the apparatus connected with a large colliery, where there is no likelihood, or necessity, for any such change in the course of operations. Sometimes, instead of putting up fresh machinery at the different shafts of the metal mines as they are opened, the existing engines are made to do their work at considerable distances by means of flat-rods, chains, and pulleys. All these things have to be taken into consideration in the sinking of shafts and the arrangement of underground workings. The shafts in the collieries are openings nearly or quite perpendicular, in the metalliferous mines they are either carried down in the lode itself, or sunk perpendicularly, for the purpose of intersecting the lode at a certain depth. Sometimes, partly from accident, partly from richness of the ground in certain parts, partly from the nature of the ground, you see a number of shafts very close together, which, looked at expost factor. Sometimes, partly from accident, partly from richness of the ground in certain parts, partly from the nature of the ground, you see a number of shafts very close together, which, looked at expost facto, seem quite unnecessary to be so crowded, and were evidently attended with very great expense. As a general rule it may be said that such cases would not have resulted if one could have known beforehand what the working would be likely to be worth. In the case of the celebrated Comstock lode, for example, you see such an aggregated number of shafts that it is evident at once there has been a very great deal more expended on this dead work than were aggregated number of snatts that it is evident at once there has been a very great deal more expended on this dead work than was really required, only it was thought that it was necessary to work the lode in so many separate portions. The course of the works may be thrown quite out of their original direction by the fact of the shoots of ore extending in directions different from that they took at the commencement. In such a case it will be necessary took at the commencement. In such a case it with the bessessink fresh shafts, to intersect the direction in which the main axis of the shoot is tending; or if the ground be not of sufficiently promising character to warrant that expense, an oblique shaft will be sunk in the axis of the shoot itself. This is altogether a class of

workings which does not occur in working stratified deposits.

In one system of working the coal deposits the preliminary workings are carried forward of a comparatively narrow character by the driving out of levels on what is termed by the miners the water level—that is, a line nearly or quite horizontal. Sometimes two, sometimes three or four, of these galleries run along parallel to each sometimes three or four, of these galeries run along parallel to each other. Then a second class of workings commence up the incline of the seam, feelers as it were, having the importent object of opening out the ground for the subsequent wider working, and also to some extent draining the whole coal of gas before these wider workings come into play, and in the third instance serving afterwards as permanent roadways. All this it will be seen is preparatory and exploratory. In the other system this opening of the ground is not carried forward to such an extent, but along with this exploratory work goes a partial working of the coal by means of successive openings, locally termed "bords." The levels serve as roadways, and are connected by cross-cuts at intervals for the purpose of ventilation, and thus you have the ground cut up into a series of pillars. The getting of the mineral on a large scale has to be preceded in both systems by a large amount of preparatory work, which in some instances may be remunerative removing one-third which in some instances may be remunerative removing one-third or one-fourth of the coal, leaving the rest for subsequent working. In the collieries you may generally expect, almost universally, a large amount of regularity, and as a rule the ground is easy to cut, so that the workings may be carried on with much facility, and you are able to calculate how long it will take to get to such a boundary, or to cut a certain quantity of coal.

In metal mines the case is different; the rock is generally much harder. A full complament of men will perhaps he able to advance

harder. A full complement of men will, perhaps, be able to advance not more than 1 fm. a week—2 fms. is very good work indeed—and 1 or 2 fms. a month is very fair. The ground is so hard that the plan of the mine must be settled long beforehand; allowance must plan of the mine must be settled long beforehand; allowance must be made, on the other hand, for the fact that the circumstances may so change as to change the plan of the work: to give each of these considerations its due attention is sometimes like steering between Scylla and Charybdis. There ought to be a calculation of what should go forward for some years ahead, and to this end a great amount of liberty should be allowed to the manager by the shareholders, who are not so well acquainted with the special circumstances of the mine. From the slowness with which the operations proceed, the manager ought to have his eyes thoroughly about him, and see years beforehand what he intends to do, where shafts should have to be sunk and levels driven, in order that the workings might run on together. The lecturer had never seen this so well exemplified as in the management of the Devon Great Consols Mine, by Capt. Puckey, who in his reports had always a plan of something or other to be carried out, three or four years ahead. And this necessity is especially marked if there are several lodes to be dealt with. Another point of great importance is the necessity for always keeping a large proportion of the men at work on these exploratory or preparatory operations, in the sinking of shafts and driving of with. Another point of great importance is the necessity for always keeping a large proportion of the men at work on these exploratory or preparatory operations, in the sinking of shafts and driving of levels. You often find it to be the case that when persons not conversant with mining enterprise and mining arrangements step into anything connected with the management of a mine, as directors or otherwise, they have a great notion of stopping the levels and shafts as soon as the mineral wrought in them ceases to pay. It may be relied upon as an axiom in vein mining that so soon as you see your ends stopped in this way—and the same may be said of the shafts—you are almost certain to observe that the mine itself is coming to a close. For although you may have behind you very good removable ore, unless you open out the ground in front in order to search for fresh deposits, owing to the capaciousness of the lodes, your workings are pretty sure soon to come to an end. Always observe, therefore, whether the shafts and levels are advancing well beyond the ground which is in progress of being worked. It depends on the nature of the ground and circumstances of the mine how far in advance the levels should be carried. In Cornwall distances of 20, 40, 50, and even 100 fathoms have been driven in dead ground before a favourable result was again observed.

tances of 20, 40, 50, and even 100 fathoms have been driven in dead ground before a favourable result was again observed.

As regards the representation of the mines on maps and plans, the matter is very simple respecting collieries, the workings there being deferred to a horizontal plane. The part representing the coal withdrawn is, in some cases, coloured dark, in others the pillars left have the darker tint; faults are marked in with a yellow line, and the course of the ventilation is indicated by arrows. Managers of collieries are required by Act of Parliament to prepare their plans on a scale of two chains to an inch. It is usually the case in our British metal mines, and in many foreign ones, to represent the lodes or levels by single coloured lines in plan; the lines being lodes or levels by single coloured lines in plan; the lines being drawn straight between points in the lode, determined by the theodolite, or compass. The line on the plan, therefore, strictly indidolite, or compass. The line on the plan, therefore, strictly indicates a line in the lode, and not necessarily the continuous axes of cates a line in the lode, and not necessarily the continuous axes of the lode, hence the great irregularity these lines sometimes present. A number of these single lines together cause very great confusion; it conduces much to clearness to indicate the levels by means of double lines, filled up with colour. A better plan is that adopted at some of the Hungarian mines, where the double lines indicate the actual walls of the level, and where certain signs indicate the means of securing the levels in those parts, or other details. The plans are often accompanied by a vertical section of the workings, or their projection on a vertical plane. The scale of the drawings not being fixed by Act of Parliament varies very much, 8 or 10 fms. to the inch is often used: if a representation on a large scale is re-

to the inch is often used: if a representation on a large scale is required 5 fms. to the inch is adopted.

The lecturer then referred to and exhibited a beautiful drawing of the Belgian coal field, by Mr. Thimm, showing the range of the beds between certain levels over the district.

#### THE IRON AND STEEL INSTITUTE.

The annual general meeting of members was held in the theatre of the Institution of Civil Engineers (by permission of the Council of that institution) on Tuesday and following days,

Mr. W. MENELAUS (Dowlais) in the chair.

Mr. JOHN JONES (the secretary) presented the annual report and statement of accounts for the year 1815. It appeared from the report that the institution continued in a flourishing condition. The total number of members elected during the year had been 163, while the total number of members upon the books at the end of Desember last was 891. The distribution of members was shown in the following statement:—North of England, 175: Stodiand, 83; West Stodies, 171; Southand West Yorkshire, Derby, Lincoln, and Nortingham, 87; Staffordshire and Shopothire, 111; Lancashire, Chesbirs, and North Welse, 115; South Wales, 63; London, 92; other districts, 27; America, 18; and the Continent of Europe, 43. The accounts for the past year show that at the commencement of 1875 there was a balance in the hands of the treasurer of 2424, 13s, 34. The receipts, including the balance, had been 2424, 0s, 6d., and the expenditure during the same periol was 2114, 1s. 61, leaving a balance in hand at the present time of 317, 19s. The council had gone into the list of subscriptions in arrear, and found them to amount to 252, 8s, on Dec. 311ast. The stock of journals and transactions represented the sum of 360. During the year 1875 three general meetings were held—two in London and one in Manchester—at which a member of papers were read by various gentlemen. The council received an invitation from members in the vicinity of Manchester to hold the autumn meeting there, and it was accordingly done, and was highly satisfactory. The council also expressed their best thanks to the members of the local executive committee of the iron trade of North Staffordshire, to the owners of works that were opened for inspection, and to others. The council had awarded the Bessemer medal for 1875 to Mr. R. F. Mushet. The Chairman, in movi

dustries—the Scotch iron trade. Mr. Robert Mushet had followed closely in the footsteps of his father during his whole working life, perhaps the most important of his successes being the invention of the spiegeleisen process in connection with the manufacture of Besner metal. The addition of the spiegeleisen was one of the most useful inventions connected with that manufacture, and was well worthy of being associated with the Bessemer process—in fact, one was a complement to the other. It was Mr. Mushet's invention that

was a complement to the other. It was Mr. Mushet's invention that made the Bessemer process the great success it now was. He regretted to say that Mr. Mushet had been for many years suffering from ill-health, and that he could not possibly attend the meeting—indeed, he had written to their secretary in reply to the notice that was sent him announcing the award of the council expressing doubt whether he would be be alive at the date of the meeting, and asking that if not it might be handed to his widow. Under these circumstances the council had considered it advisable that a representative of the Institute should present it to him, and as he was residing in his (Mr. Menclaus's) neighbourhood he had undertaken to make the presentation on their behalf.

Mr. Bessemen congratulated the Institute upon the award which had this year been made of the medal which bore his name. The members were all aware of the little differences which in the earlier progress of his invention had existed between himself and Mr. Mushet, and which he was sure they now both equally regretted. That Mr. Mushet's invention supplemented his own there was not a shadow of doubt, and it was not now necessary to refer to the circumstances which caused the early disputes, and they had long since buried the hatchet, and for many years past they had been good friends, and had, he believed, respected each other. He was happy that the medal had been presented to Mr. Mushet, for he was sure that no one more richly deserved it.

other. He was happy that the medal had been presented to lat. Adding, for he was sure that no one more richly deserved it.

The PRESIDENT then called upon Mr. Marsh for some remarks on Mr. Sandberg's paper on the strength of rail joints.

In the course of the adjourned discussion of Mr. C. P. Sandberg's

paper "On the Strength of Rail Joints," Mr. Marsh pointed at that the weakness of a fish-plate was always the boit. He thought that the weakness of a fish-plate was always the boit. He thought Mr. Sandberg had gone to the extreme, and had had to add to the head to compensate for what he had cut away elsewhere. Putting rigidity in any part of the rail was bad; what they wanted was uniform being, the did not object to the fish-plate being strengthened, but it was an error to make the did not object to the fish-plate being strengthened, but it was an error to make would like to ask whether steel fish-plates had ever been ed with iror rail.

Mr. Cowper remarked that, as they all knew that steel was stronger than the rail.

The President said that they had made many steel fish-plates, but they did go beyond the gates of the works. They had also made in ship lates for sail, though he could scarcely understand why that was done. Manifested would be only too glad to have the form of a fish-plate satisfactorily settled, for make it difficult to roll.

Mr. Sanderse differed from Mr. Marsh as to not wishing the joint to be sating as the rail. He also found it best to have the bolts as small, so possible.

Mr. Nordenerell said that as to steel fish-plates, the circumstances now to formerly were very different. There could be no doubt that to put a very latent steel fish-plate against a soft iron rail would sometimes be objectionable form damaging the rail; but since they had made steel so objectionable form damaging the rail; but since they had made steel so objectionable form to make the difference of the could now be found more suifactory in existing the rails of the said was that of Mr. G. J. Snelus, on "Tincledny, and Other Refractory Materials."

Mr. Pattinson regarded potash and soda as the most detriment to the ganister, the larger the proportion of these the less rofted to the ganister, the larger the proportion of these the less rofted to the ganister, the larger the proportion of these the less rofted to the gani

hot stove.

Mr. I. LOWTHIAN BELL remarked that it was e-sential in making como of bricks that the conditions of the tests should be precisely similar. These ture of a Whitevell stove was a low temperature, and the destruction of a finite would proceed from a different reason. Much furme was carried over contained elements which mixed with the infusible brick formed a very ntained elements which the amount of the potash would reduce the release of the state of the sta

Mr. Symbus thought the extent to which the potash would reduce haracter of the brick would depend upon various circumstances. A of peroxide of iron, he found the Glen Boyd fire-bricks excellent for poses, although they were red with oxide of iron. He believed that of iron consolidated the brick, and that the bricks containing it did the same extent as a pure silica brick, whilst the non-expansion pro-The President said that the council had for some time had under

poses, although they were red with oxide of from. He believed that the press containing it did not expand to firm consolitated the brick, and that the bricks containing it did not expand the same extent as a pure sities brick, whilst the non-expansion prevaled but he as me extent as a pure sities brick, whilst the non-expansion prevaled but her consideration the question of introducing subjects by sugmore easy method than writing a paper, and it was going to be tested that day; he would, therefore, ask Mr. S.nith to give the his experience of the use of molten iron direct from the blade-furns in the manufacture of Bessemer steel.

Mr. J. T. Swirn, of Barrow, said that with regard to the subject of many were made effect from the blast furnace, he might observe that at Barrow remove made effect from the blast furnace, he might observe that at Barrow remove made effect from the blast furnace, he might observe that at Barrow remove made where the might observe that at Barrow remove made where the firm that the control of the converter was seldom less than 40 yards, and frequently 200 yet were discovered to the converter was seldom less than 40 yards, and frequently 200 yet from 154 for might works it became necessary to convey the ladies a distance of from 154 for might work in became necessary to convey the ladies and sixtance of from 154 for might yet they had accomplished it successfully. This would be restilly under the second that the cooling of the metal during the first half hour was very small index. They had made a railway cutting at the foot of the pigbel, and the work in the cooling of the metal during the first half hour was very small index. They had made a railway cutting at the foot of the pigbel, and the lowester runs these direct to the converter. The process takes about half an hour, as to see the second that the cooling of the second that the process the second that had been throughline cupola, although they knew it contained now in the process the second that had been throughline cupola, althoug

the contrary may be, most certainly value the assemble as we have the hand they are already.

It was elicited that the saving by the conversion of the metal whilst slill be from the blast-furnace was from 3s. to 4s. per ton.

At the conclusion of the discussion the meeting was adjourned until the following morning, when the reading and discussion of papers was proceeded with.

#### THE FERROUX ROCK-DRILL AND AIR COMPRESSOR By Mr. H. W. PENDRED, C.E., Lond

The two tunnels, respectively known to the world as the Mont Cenis and the St. Gothard, represent two of the grandest feats of modern engineering. The history of that penetrating Mont Cenis, and the leading events attending its formation, are too generally familiar for the author to dwell now upon them; but he will says word or two of preface as to the St. Gothard Tunnel, where the machine which he is shout to describe has carred its renown. Of machine which he is about to describe has earned its renown. macaine which he is about to describe has earned its renown. It seven tenders for the contract, five were quickly dismissed for various reasons, the competition remaining between the Italian Company of Public Works and Mons. Favre; the choice fell to the latter, because the Italian Company required nine years to construct the tunnel, whilst Most Favre wanted but eight; besides this, the former only consented to forfeit the various reasons, the competition remaining between the Italias Company of Public Works and Mons. Favre; the choics fell to the later, beass the Italian Company required nine years to construct the tunnel, whilst Mons. Favre wanted but eight; besides this, the former only consented to foreis the caution money (800,000 frs.) required by the company after the term of Ilyen, whilst Mons. Favre agreed to forfelt at the end of nine years. The matrial ecountered at Goeschene end was chiefly hard granite gniess, at first full of fissers and cracks, but afterwards it was more homogeneous. The two tunnels at Mol Cenis and St. Gothard are not only remarkable as triumps of enginering sees in themselves, but they are also distinguished above all other similar works from the stimulus which their construction gave to the improvement and development of rock-drilling machinery—a branch of mechanism that deserved much most beating than it had received previously, for such labour-awang machines matter be of great value in countries possessing any share of mineral wealth. The Most Cenis Tunnel formed the greatest trial ground ever brought to the attention of the ventors and makers of either rock drills or nir-compressors, and now St. Gothal is testing and condensing the experience grised at its older companion. In my fairly be said that at both tunnels every known example of rock-drill habeautif, the principal and most successful being the "Ferroux," the McKean, the Sammeliners, and the Dubois Francois.

The weak point in all such machines is the feeding arrangement; but the Ferrot machine overcomes this difficulty effectually. The feed in this machine is at allotment principle—a certain piece of work is red to the borer at ones, and mallot the principle and condensity of the companion of the proper of the prop

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securely fixed to the boring cylinder, in which reciprocates another piston and se boring rod. The compressed air entering at the coil produces three actions; as boring rod. The compressed air entering at the coil produces three actions; to the performance of the produce of the control of the pitch of a toth respectively, in a pair of racks fitted to the upper part, the pitch of a toth respectively, in a pair of racks fitted to the upper part, the pitch of a toth respectively, in a pair of racks fitted to the upper part, the pitch of a toth respectively, in a pair of racks fitted to the upper part, the pitch of a toth respectively, in a pair of racks fitted to the upper part, the pitch of a toth respectively, in a pair of racks fitted to the upper part, the pitch of the pitch of the pitch of the rack formation of the provided with two small cylinders are consoliated with the action of these works a piston, so formed on its outer side ranged horizontally; in each of these works a piston, so formed on its outer side ranged horizontally; in each of these works a piston, so formed on the new to each of the frame bars. It will be seen that the action of these pawls is co each of the frame bars. It will be seen that the action of these pawls is covered of those regulating the forward movement of the propeller, and they is every find the pitch of a toth in the racks, so that while such pitch admits of course to prevent any greater degree of recoil on the part of the borre upon the rather than the pitch of a toth in the racks, so that while such pitch admits of course to prevent any greater degree of recoil action and prevent fracture, at the same clastic cashion to softed the recoil action and prevent fracture, at the same clastic cashion to softed the tech ordinary and adding faces prevent them observed the play is too limited to vitiate the boring action. As the pistons in the ordinary course of the compressed air, they are thus kept and produced the recoil action and prevent fracture, at the same clastic cashion to

ime the play is too limited to vitate the contag action. As the pistods in the mateliate teth, while their oblique leading faces prevent them observed into the ratchet teth, while their oblique leading faces prevent them observed into the ratchet teth, while their oblique leading faces prevent them observed into the receipt of the compressed air is to operate through a hollow rod, and rivescond action of the compressed air is to actuate an air engine at the low. The third action of the compressed air is to actuate an air engine at the low. The third action of the compressed air is to actuate an air engine at the low. The third action of the compressed air is to actuate an air engine at the low of the propeller cylinder. This engine is constituted of a cylinder within ear of the propeller cylinder. This engine is constituted of a cylinder within ear of the propeller cylinder. The crank is a slotted one, having on the one side he piston by a connecting rod. The crank is a slotted one, having on the one side he piston by a connecting rod. The crank is a slotted one, having on the one side he piston by a connecting rod. The crank is a slotted one, having on the one side he piston by a connecting rod. The trank is a slotted one, having on the one side he piston by a connecting rod. The shaft is a slotted one, having on the one side at the piston by a connecting rod of the shaft is a slotted one, having on the one side at the standard of the shaft is a slotted one, having on the one side at the standard of the shaft is a slotted one, having on the one side at the standard of the shaft is a slotted one, having on the one side at the standard of the shaft is prolonged and supported in another bracket at so exactly search of the standard of the shaft is propagated and supported in another bracket at shaft is propagated and specially shaft in another bracket at shaft is propagated and shaft in the shaft is propagated and shaft in the shaft is propagated and shaft in the shaft is an escentric which actuates a special repa

## THE CASSON-DORMOY PUDDLING FURNACE.

By Mr. E. FISHER SMITH, Dudley.

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The furnace is double, and includes the grate, the puddling bed, and the preparatory chamber. The grate is fitted with a cast-iron plate, of the full width of the furnace, and sloping upwards to the plate, of the full width of the furnace, and sloping upwards to the plate of about 30°, and is constructed of cast-iron fire-bars set close together; the bottom is also formed of ordinary round or square together; the bottom is also formed of ordinary round or square together; the bottom being kept air-tight, as also the sloping back; this back has bottom being kept air-tight, as also the sloping back; this back has drop door to enable the underhand occasionally to prick the bars. The area of the grate is only 6 ft. 10 in.X1 ft. 10 in., being somewhat less than that sin ordinary single furnace. The main object of the sloping plate is to prevent an ordinary single furnace. The main object of the sloping plate is to prevent an ordinary single furnace. The main object of the sloping plate is to prevent an end way. The pudding basin rests on a brick pillar about 1 ft. 4 in. from the gound; on this is first set a wrought-iron circular open dish, with sides about it does not be also as the sum and the state of the

they scarcely ever erack. The only renewals are of the doors, door frames, and bridge plates.

4.—As the strain of the furnace is almost entirely thrown upon the circular side plates, no external or casing plates are requisite, thus permitting an economical plates, no external or casing plates are requisite, thus permitting an economical construction of furnace. The buckstaves consist merely of rails or similar bars.

The advantages of a preparatory chamber are—1. The saving of time in melting jown, which in this case means a proportionate saving of fuel.—2. The pigs are freed from the siliceous matters derived from the blast-furnace pig bed, and adhering to their surfaces. Ordinarily, this sand is well known to be injurious to the bed of the pediding-furnace itself by wasting the fettling, and in other ways. The bed of the pediding furnace itself by wasting the fettling, and in other ways. The can be regulated so that the furnace is perfectly under control, and the puddler can obtain either an oxidiating or reducing dame at will.—2. The drop doors and sloping back enable the underhand to prick the bars, and thus clean the grate of longed imps.—4. The sloping back grate, cooled behind with blast, prevents the formation of cinker. It would be difficult to exactly determine the indirect or contingent advantages contributed by each separate portion of the furnace, but it may be added that the increased efficiency of the reverberatory furnace has been found in practice to have the result of saving about one-half in fuel, fettling, casting, and tricks. Alterations in an old forge, in which to apply this system, can be made without interfering with its current work or its existing plant, whilst considerable space is gained for ventilation or other purposes, inasmuch as five of these furnaces will do the work of 15 old single ones.

### NOTES ON IRON ORE DEPOSITS AT NAEVERHANGEN,

NEAR BODOE, NORWAY. By Mr. THORSTEN NORDENFELT, London.

Mont

These enormous deposits of ironstone, so conveniently situated for export to England it is estimated that it can be sold on the spin of the school end from 15 to 38. With regard to the at 4.4d, or delivered in England at 14s, 11d, per ton), are of the greatest interest from the pealiar formation of the deposits above the surrounding level. They have been traced continuously for a distance of more than six English miles from the total continuously for a distance of more than six English miles from Bodoe, and about six of dermany and the spin of the spin

considerable width, though it does not contain any real plales, because in the flat valley there are several smaller-chains of tills running in the same direction as the correct commences about three Engish miles. It shows on the surface the great part of the way, and not be asserted the correct of the co

#### TECHNICAL EDUCATION AND THE CITY GUILDS.

For some years past the handsome premiums offered by the Master, Wardens, and Court of Assistants of the Worshipful Company of Turners have been energetically competed for by those in the trade, and the announcement has now been issued for the current year, showing that the company intends to maintain its excellent custom. It will be recollected that the company offer their silver medal and the freedom of the company and of the City of London to any workman, whether master, journeyman, or apprentice in the trade in England who may send in the best specimen of hand-turning in each of the three subjects of competition. This year the subjects of competition will be turning in wood, pottery, and diamonds.

may send in the best specimen of nanu-turning in cases to the competition. This year the subjects of competition will be turning in wood, pottery, and diamonds.

The competition in wood includes turning in both hard and soft wood. The conditions which will be considered in awarding the prize (Messrs, C. Hutton Gregory, J. Jaques, J. Jones, T. Ridout, and T. B. Winser being the judges) will be beauty of design, symmetry of shape, utility and general excellence of work-manship; exact copying, so that two objects produced (such as two cups, vases, boxes, or jother articles), may be facsimiles in every part, or exact measures of capacity; fitness of the work and design for the purpose proposed; ability to turn, whether circular or oval, in both classes of wood; and novelty in application of turning or in design. Carving and polishing is admissible, and if skilfully done any additional effect produced by it will be considered, but it must be subsidiary to the turning. The candidate may make his own selection from the conditions mentioned; but the one who best fulfils the largest number, including the most important qualities, will be preferred. The work must be all hand-turning, produce I in the lathe without special rest or tool apparatus; and the carving must be the work of the exhibitor. Specimens must not exceed 24 in. In height, and 11t. In diameter.

important qualities, will be preferred. The work must be all hand-turning, produce I in the lathe without special rest or tool apparatus; and the earwing must be the work of the exhibitor. Specimens must not exceed 24 in. in height, and 1 ft, in diameter.

The competition in pottery, in which class Messrs, J. J. Holzapffel, Mf. J. Copeland, and W. H. Northout are the judges, includes terra cotta, stone, earthenware, and porcelain, but all unglazed; the conditions are to be similar to those in the wood competition. Beauty of design, utility, fitness for the intended purpose, and excellence of workmanship will be considered in awarding the prizes. In addition, ornament produced by the runner or other hand tool; and also incised work is permitted, but it must be subsidiary to the turning. No competitor is to send in more than two specimens, neither of which must exceed 18 in. in height. The bronze medal of the company will be given to the competitor second in merit, and the company's certificate of merit to the third in each of the above subjects of competition. In addition to this, the Court has placed at the disposal of the judges a sum of 30/1, to be distributed, according to their discretion, as money prizes—16/. among the exhibitors in wood and 16/1 among those in pottery.

In the diamond cutting and polishing competition the Baroness Burdett Courts, who is a member of the company, has placed at the disposal of the Court the sum of 50/1, to be distributed in this class among the competitors according to the discretion of the judges. Specimens of work under this heading will be divided into classes, according as they are—Brilliants weighing more than one carat; brilliants under one carat; single cut; or roses. In each class a prize will be given if the specimens entered are considered worthy, but the first prize of 25/3, and the silver medal will be ad judged to the candidate who shows the highest excellence of workmanship in the greater number of the above-named classes.

In making their award, the judges wil

THE TECHNICUM MITTWEIDA.—To judge from the number of students on the books, and the distance whence they come, the technical school bearing this title would seem to be a very useful institution. It is explained that it differs from a polytechnic school insamuch as the latter not only teaches machine construction but engineering, chemistry, architecture, &c. The technicum having only one object in view, the energy of the student is concentrated entirely upon it, and each learns the precise bearings which the science he is being taught has upon his especial business, and thus he becomes avery high class workman. The school is divided into two divisions, the one for those who intend to devote themselves to machine engineering and construction, and the other for those who design to become superintending foremen and draughtsmen. The diploma of the school can be obtained in from 2½ to 3½ years study. It is considered undesirable that students should enter under fifteen years of age, and hitherto the ages at admission have varied from 15 to 38. With regard to the nationality of the students, there are at present 400 of them that have been entered as belonging to various parts of Germany, Austro-Hungary, Russia, Holland, Belgium, Switzerland, Italy, and the Danubian Principalities in Europe; to Asia Minor, the East Indies, and Java in Asia, and to the United States, Texas, West Indies, Chili, and Brazil in America. The several courses appear to be carefully arranged, and there is no doubt that many natives of Great Britain training for mechanical engineering would profit considerably from pursuing the course. nical school bearing this title would seem to be a very useful insti-

Lead mining in North Wales is now looking rather better than it did, and some of the mines that have been recently re-opened out, and powerful pumping and other machinery put down, are likely to turn out profitable to those who have invested in them. At the Fron Frownog the lodes are looking remarkably well, and the lead is rich, and there is every prospect that it will turn out very profitable to the enterprising company who it is said have spent between 30,000/, and 40,000/. on the concern. A good deal of water mixed with the sand has to be contended with, requiring the changing of the buckets about every six hours. The Vron Hall Mine is being opened out by a London company, and there is every appearance of its turning out successful. The well-known Hendra and Rhosesmor Mines, that at one time were most profitable, like others in the Mold districts, are still flooded; but those interested in them anticipate that the level now being driven under the Halkin Mountain from the neighbourhood of Flint will eventually be the means of draining them, as well as a vast area of valuable and highly mineralised ground, which for many years has resisted all the efforts of powerful machinery to clear. Business is very fair at the smelting works of Walker and Sons at Bagillt, and the same may be said with respect to the vast chemical works of Muspratt at Flint.

The Coal Trade has become inactive, and at many places the miners are on short time. Still, sinking operations are being carried out, in some instances on an extensive scale. At Mostyn the Hanmer Colliery has been doing a steady trade; but for some reason or other there has been a deficiency of wagons. At the new winning of the West Mostyn Iron and Coal Company they are about sinking a shaft 15 ft. in diameter, for which tenders are invited. It is said that there is a project on foot to open out a very large field of coal, two shafts to be sunk in the neighbourhood of Greenfield, a short distance north-west of Bagillt, and two at Llanelly Moor, on the estate of Mr. A

other specialities in connection with mining operations at home

ROOKHOPE .- From a plan of the old and present workings of this mine, made in 1872, by Mr. Arthur Waters, manager of the Roman Gravels and Tankerville Mines, it appears that there was a continuous course of lead ore in the 15 and 25 fm. levels of more than 300 fms. in length. The mine adjoins Rookhope Burn Mines, belonging to Mr. Beaumont, M.P.; and, the new company having now got into full operation, with excellent prospects of having one of the richest mines in the district, we purpose to give a few particulars of it, basing our remarks upon Mr. Waters's plan and the report which accompanied it, and upon the operations and prospects at the present time from official data. Writing in 1872, Mr. Waters referred to the immense sums paid to the Beaumont family out of profits for two or three generations past (50,000). a-year for 50 years in succession), and the apparently inexhaustible yield of the surrounding mines in the present day, as unmistakable evidences that Rookhope had the situation and all the conditions necessary to profitable mining. The principal vein in Rookhope had then been worked on a continuous course of ore more than 300 fms., and had yielded some thousands of tons of lead ore at the adit and the 15 and 25 fm. levels, but had not been worked deeper. The lower level (the 25), Roman Gravels and Tankerville Mines, it appears that there was a some thousands of tons of lead ore at the adit and the 15 and 25 fm. levels, but had not been worked deeper. The lower level (the 25), he said, had been driven 190 fms., all through a rich course of ore in the end and bottom, and in some places in the back, worth 5, 6, and 8 tons per fathom, which was stoped at 30s. per fathom, showing the easy and inexpensive nature of the ground. But to work the mine and bring up the returns to 100 or 150 tons per month he recommended sinking the shaft to another level, and when that section was well laid open for stoping he considered 150 tons per month would give a profit of 12,000% a-year. At this time, and upon these prospects, the shares—15,000 in number—were selling at 5% to 7% each, and we now propose to examine into what the company did to bring about the great results anticipated by Mr. Waters. They erected steam-power, machinery, and dressing-floors at great cost; they worked at and above the 25 and 15 fm. levels, and raised and sold therefrom about 8000% worth of ore. But there was a winze sunk they worked at and above the 25 and 15 fm. levels, and raised and sold therefrom about 8000l. worth of ore. But there was a winze sunk below the 25, in a lode valued at 6 to 8 tons of lead ore per fathom, which the late company were unable to continue, owing to the water, the 42 not being driven far enough to drain it. Towards the work which Mr. Waters recommended to be done in order to make the mine, as he said, "vie with any of the Beaumont's in the county of Durham," they sunk the shaft 18 fms. below the 25, and drove the 42 upwards of 90 fms. towards the ore ground and the rich winze referred to and then some twelve months ago, and before their obferred to; and then, some twelve months ago, and before their objects were reached, they found all their capital under the Limited Liability Actexhausted; and after various negociations, no alterna-Liability Act exhausted; and, after various negociations, no alternative was found but to wind-up and reconstitute the company, with fresh and ample capital. We thus arrive at the present company in 15,000 shares of 1l. 10s. each, fully paid-up, the mine free from all debt and liability, and with nearly 6000l. cash capital in hand to carry on the work, which will be be chiefly, for the present, driving the 42 to get under the rich winze and the long run of ore found in the 25. This will be accomplished in a few months, and the great point in the mine reached. In the meantime, the agent hopes to more than pay costs from the returns which can still be raised from above the 25, and to shortly bring the mine into a dividend state. Thus, it will be seen that the mine is not only a first-class property, but that the prospects are even better than they were when the shares in the old company were largely dealt in at 5l. each for the same number—15,000.

MINING AND STOCK EXCHANGE NEWS OF THE WEEK Messrs, F. W. Mansell and Co. (Sworn Stock and Share Brokers) Pinner's Hall, Old Broad-street, write to us as follows:—

Messrs, F. W. Mansell and Co. (Sworn Stock and Share Brokers), Pinner's Hall, Old Broad-street, write to us as follows:—
West Pateley Bridge (Lead).—The formation of this district is due to a grand convulsion of Nature, which at some remote period of the earth's history upheaved the mass of limestone in Greenhill (where the West Pateley Bridge Mines are situated), forming the lofty heights of Whernside, and casting upward to the north-east the heavy masses of millstone grit, leaving a deep, crooked, and rugged cavity in the naked rock, which afterwards abraided, partly filled up, and smoothed by the rushing current of a tumultuous sea, formed the picturesque valley. This rending of the earth's crust has evidently taken place after the deposition of the magnesian limestone, and before the commencement of that of the New Red Sandstone; as the former rock has been thrown upward, and rent into fragments all along its south-western edge, while the New Red Sandstone to the eastward does not appear to have been subjected to any such violent displacement. Prof. Phillips estimates the thickness of rocky matter removed by this displacement at 700 ft. This formation of the valley, so conducive to natural beauty, grandeur, and sublimity, was also the origin of its mineral wealth, by dislocating the veins and beds of metals and minerals with which its hills are stored, and forming a receptacle in the hollow below for the rich sediment washed from the sloping hills above. The lead, coal, slate, ironstone, limestone, and gritstone mines and quarries are all due to this violent breakage of the strata; as well as the romantic scenery, wood glens, rich meadows, and pastures which ornament its sides and bottom. The eve of the profound philosopher can alone to this violent breakage of the strata; as well as the romantic scenery, wood glens, rich meadows, and pastures which ornamentits sides and bottom. The eye of the profound philosopher can alone read the pages which contain the annals of this great pre-historic period; they are written in and on rocks, in vast diluvial mounds, and in terraces, which have formed the shore of inland lakes or sea estuaries. At length the fulness of time was complete, and man became an inhabitant of the earth, but his first settlement and actions are alike lost in the dark mist of antiquity. That the Romans worked the mines in the Pateley Bridge district we have the most satisfactory proof in the existence of pigs of lead bearing the Roman stamp; two were found in 1735, one of them, preserved at Ripley Castle, bears—I.M.P CAS: DOMITIANO. AYG. COS: VII.—BRIG. Thus proving that those pigs were cast as early as the year 81 of the Christian era; the syllable BRIG indicates the territory in which they were raised. they were raised.

I. X. L. (Gold and Silver) .- Large investment purchases con-I. X. L. (Gold and Silver).—Large investment purchases continue to be made, and already heavy transactions have taken place at a premium. The Consolidated Virginia Mine, upon the same mineral belt, returned in profits last year 2,500,000l. sterling upon a capital of 100,000l.; as a feature strongly in favour of I. X. L., it may be mentioned that the Consolidated Virginia Mine was sunk 1000 ft. before meeting with any ore to value. I.X.L. has had ore from the grass shoots downwards, and improving with each level. With reference both to Exchequer and I.X.L., Mr. Chalmers has stated that when these mines shall have been sunk 1000 ft. the result will far exceed anything yet realised from the richest of the Comstock mines; the strongest evidence as to the sincerity of this opinion is to be found in the fact that Mr. Chalmers has undertaken to stock mines; the strongest evidence as to the sincerity of this opinion is to be found in the fact that Mr. Chalmers has undertaken to manage the L.X.L. Mine without any salary whatever until dividends are paid to the shareholders. Mr. Romaine, C.B., after a personal inspection of the mine, has become a large shareholder; and a distinguished engineer, who also visited the mine, has likewise become a large shareholder, and states that if the English public could be made to understand the great value of the property the shares would be readily absorbed by investors at a considerably higher level of quotations than those now ruling. The mine is not only of enormous value, because its ores are exceptionally rich, but because it has also, in the shape of wood and water, unusual facilities for an extensive and economical development. The directors receive no remuneration for their services except out of net profits, and the expenses in London are limited to rent and a small salary to the secretary.

CONDES OF CHILL.—Previous notices have dealt with the internal government and administration of this Republic, as showing the advantages and facilities for the safe and satisfactory development of its mines. Mention may now be made of the fact that there is sufficient wealth in Chili, and the capitalists have sufficient confidence in the Government to advance them all they require; but as capital in Chili is 12 to 14 per cent. per annum, it answers the purpose better to take it in England at half the expense. Property increases in value every year, and farms which 10 years ago were rented at 2000l, per annum can now be rented at 5000l, living is also much more expensive. There are several banking establishments in the country, with banks in all the principal towns; some have a paid-up capital of 2,000,000l, and yield an average of 6 to 8 per cent. for six months. All the large enterprises of the neighbouring Republics are carried on with Chili capital and Chili labour, and were it not for these neither the saltpetre bonds of Peru and Bolivia, nor the mining enterprise of both these countries, would produce anything at all. The communication with England is now principally done with steamers; the Pacific Steam Navigation Company has a fleet of cient wealth in Chili, and the capitalists have sufficient confidence steamers; the Pacific Steam Navigation Company has a fleet of upwards of 60 steamers, the largest and finest in the world, trading between Liverpool and Valparaiso. Our trade with Chill is so im-portant as compared with the trade she has with other nations, that between Liverpool and Valparaiso. Our trade with Chili is so important as compared with the trade she has with othernations, that it is unjust to consider her a defaulter when she is so honourable and punctual in fulfilling her engagements; it is the more to be regretted because Chilians admire and copy as far as possible our laws, enterprise, and industrious habits, and actually feel hurt (proud and independent as they are) that England should speak so unjust and so undeservedly of them. The public debt of Chili is by no means large, and their credit is good, the 7 per cent. being now quoted 100 to 102. As the World with great truth has recently said, "Chili has always paid her debt honourably, and, no doubt, will continue to do so." Chili has exported in metals and minerals alone since 1844 the value of 77.210.458. and in agricultural produce 34.886.420l.: total up to 1874, 112.076,878l. Undoubtedly Chili is not so rich as many of her sister Republics, and the only means it has to increase the revenue is to promote intelligence and stimulate the inhabitants to industry, and the exchange of its products with other countries, which is the constant aim of the Chilian Government.

Argentine (Gold).—Enquiries to hand indicate that there are

which is the constant aim of the Chilian Government.

ARGENTINE (Gold).—Enquiries to hand indicate that there are some mistaken ideas with regard to the extend and producing capabilities of the property owned by this company. As to its extent for all practical purposes it is unlimited, comprising in all 14 mines; along these the native miners have worked to as great a depth as the water allowed them. As to the producing capabilities of the property, it is admitted on all hands that when the mines are fully opened out the returns of gold will depend upon the scale upon which operations are carried out. The Piqué Mine originally belonged to some native gentlemen, who got the water down sufficiently low to break 15 tons of one; the gold obtained weighed 43 ozs. 74 dwts. some native gentlemen, who got the water down sufficiently low to break 15 tons of ore; the gold obtained weighed 43 ozs. 7½ dwts. The lodes are traversed by elvan and cross courses, a feature which has invariably been shown to be most favourable for the production of large deposits of gold; in fact, the property contains all the elements which can be desired by the most scrupulous miner. Captain Joseph Vivian, who has been practically acquainted with the properties for some time, says—"Notwithstanding the brilliant prospects we have before us, perhaps you will be surprised when I tell you that the profit to begin with will be comparatively small—probably not exceeding the sum of 2500L per month. This will be attributable to the small field upon which the operations will be confined for breaking rich gold ore, but after the Piqué shaft has been sunk so as to open out a few levels and lay open extensive stoping grounds—saying nothing of the south mines, where tensive stoping grounds—saying nothing of the south mines, where chances of success are equally as good—the profits will be something enormous." To this statement the same well-known expert thing enormous." To this statement the same well-anown exper-has added that "it is my opinion the time is not far distant when we shall be able to boast of being in possession of the most valuable mining property in the world." The machinery and property on the mine, together with the work done (all available for the pre-

sent company) is worth over 100,000l. The climate is delightful, and very salubrious, provisions in abundance and of good quality, and very cheap. The first remittance of gold is expected in a few weeks, the announcement of which may be fairly looked upon as the beginning of a substantial and permanent rise in the market price of the shares, which have been largely dealt in at quotations.

EBRHARDT AND AURORA (Silver).—Shareholders cannot unduly estimate the value and importance of the main object their able and successful manager, Capt. Drake, has in view in visiting his colleagues in London. Almost hopelessly insolvent was this enterprise when Capt. Drake volunteered to undertake its management; yet in a short time the entire indebtedness was liquidated, a new mill erected, the mines placed in a condition of gradual productiveness, and withal a net available balance in the bankers' hands of not less and withal a net available balance in the bankers' hands of not less than (say) 12,000%. The mines before were never in their present condition, either as to immediate profits or prospective returns. So favourable is the feature, especially in this formation, that in depth the character and value of the veins improve for this reason, and the proposal Capt. Drake is about to submit to drive a tunnel through Treasure Hill is of incalculable importance. Beyond the significant fact that this deep tunnel will be a cross-cut (so to speak) intersecting the vein at a greatly increased depth, the general development will be thereby carried on at a considerably reduced expenditure. Operations need not be discontinued during any portion of the year. The tunnel is estimated to cost between 25,000% and 30,000%. Eberhardt shareholders, viewing their own interest, must unanimously support Capt. Drake in the bold policy advocated, by which he believes he will make Eberhardt and Aurora equal to any upon the Pacific Coast, and demonstrably proving the long-held upon the Pacific Coast, and demonstrably proving the long-held theory that the white pine ore deposits enrich and enlarge in depth, The shares have been flatter, but at present prices should be purchased without delay.

chased without delay.

BLUE TENT CONSOLIDATED HYDRAULIC (Gold).—Since the announcement that the first "clean-up" of the season has yielded gold to the value of 1404, per day, these shares have been in considerable demand. No period is so opportune or advantageous for the purchase of shares in gold wash ny companies as at the commencement of a water season; unusually havy snowstorms ensure an abundant suyply of water for more that an ordinary length of time. The income of a gold-washing mine can be calculated with great certainty by the volume of water owned or commanded. This is really the controlling circumstance in fixing the income to be derived, since by the use of the water alone can the resources be made available, and this agent can be made useful only as the work of washing lays open new and otherwise unavailable bodies of the gold-bearing gravel. Various calculations have been made as to the gold contained in the large area of gravel possessed by this company, and the most moderate place its net value at the sum of \$44,256,643. Without the important auxiliary water, supplied by the new 30-mile aqueduct, trustworthy experts have placed the net profits at 25 to 30 per cent., calculating the gravel to yield a much less percentage of gold than is now being realised. Shortening the water season to only eight months, and limiting the supply to 3000 in, the net profit will be equal to \$216,000 per annum. It has been very properly observed that when the permanent and remunerative character of these deposits come to be better known, and it is understood that they are good for generations to come as well as for to-day, they will rise in the public favour steadily, and their value find expression in the constantly appreciating value of the shares.

Stock Exchange[General Markets.—Since the middle of the month prices have gone both up and down; though this fact, added BLUE TENT CONSOLIDATED HYDRAULIC (Gold) .- Since the an-

STOCK EXCHANGE GENERAL MARKETS, -Since the middle of the month prices have gone both up and down; though this fact, added to the complication of the "account" in one sense, it certainly proved a relief. One satisfactory experience is quite beyond question—the extent to which railway securities have been taken up by permanent investors. There are several reasons why this should continue. Money is not only abundant and cheap, but getting more abundant and cheaper. continue. Money is no abundant and cheaper.

RAILWAYS .- Owing to the extent of the recent decline, some well-RAILWAYS.—Owing to the extent of the recent decline, some well-known railway securities are now obviously worth the attention of investors. For two or three years past speculative operations have raised the most favourite stocks to practically prohibitory prices, and ordinary purchasers have, in consequence, been discouraged. The tables are now turned, and in the present dearth of acceptable new creations, the change must be welcome to a very large class. From the scarcity of stock at the settlement it is to be inferred that all that has been said about the investment purchases of the past fortnight proves to be true, while the subsequent fall shows that speculators are still operating for a decline. Apart from the permanent consideration affecting railway property the general condition of the stock market favours the downward movement, and this week and next traffic returns will appear very unfavourable, from the fact that they compare with the Easter receipts of last year.

Foreign Bonds.—The principal fluctuations have been in Turk-

the fact that they compare with the Easter receipts of last year.

Forrign Bonds.—The principal fluctuations have been in Turkish, Egyptian, Argentine, Peruvian, and Spanish. As to Egyptian, the notification that the April engagements are provided for, and that the Viceroy contemplates publishing what is called the "financial part" of Mr. Cave's report, had at one time a good effect. The recent fall very much favours the dealers in our market, as for some time past they have been selling freely to Paris purchasers, and to a large extent a fall was relied upon to enable the delivery of stock to be made advantageously. Turkish securities have also been freely sold, the Fives at below 16, a price which can only be justified by the prospect of a long period of entire suspension of payments. There is no doubt that the political insecurity of the Turkish Empire has a great deal to do with the present despondency. The full service of the Turkish debt would take about 15,000,000. a-year, and surely if the country remains intact the temporary suspension of service of the Turkish debt would take about 15,000,000. a-year, and surely if the country remains intact the temporary suspension of this payment, or its reduction by half, would leave a revenue of great importance upon which to regenerate the nation. No bankrupt country ever held the power of recuperation in its own hands more entirely than does Turkey. Most other stocks in this department have given way, thus showing in the prevailing confusion that the worst and the best are equally prejudiced by circumstances not really affecting any of them. The only explanation must be the demoralised state of the market for this form of investment. It is impossible to give any adequate reason for the panic feeling that has prevailed in this department since the settlement on Thursday. There is, no doubt, room for some distrust, and sales may also be induced by the necessities of holders; but, after all allowances, there There is, no doubt, room for some distrust, and sales may also be induced by the necessities of holders; but, after all allowances, there is a great deal quite unaccounted for. Seldom has there an opportunity occurred for bona fide investors to make a judicious selection at a level of quotations that cannot possibly fail to well repay for any amount of capital thus employed.

MISCELLANEOUS. - Imperia. Ottoman Bank shares fell at one time to 40 per cent. discount. Some Colonial Government debentures have shown weakness. Foreign and Colonial Government trust certificates have fallen in sympathy with the decline in the foreign market, but there can scarcely be much more adversity to befall this investment, and the recent reports of this name illustrate the soundness of the principle upon which they were formed; instead of getting 5 and 6 per cent. per annum interest, many of the certificate-holders would (but for these trusts) be fellow sufferers with the holders of defaulted or depreciated bonds. The Stock Exchange settling days are April 12 and 28. The Bank rate of discount is 3½ per cent.

CHEMICALS, MINERALS, AND METALS,—(Messrs.J. Berger Spence and Co., March 29)—Soda: Cream caustic, 60 per cent., 124. 15s. to 13t.; soda ash, 1 3-184. to 1½d.: soda crystals, 44. 10s.; bi-carbonate, 11d.: sait cake, 2d. 15s.; Glauber saits, 2d. 17s. 6d.—Bleaching Powder: At &d. 15s.; for the whole of 1879, 7t. 5s.—Alum: 7d. for loose lump; ground, 8d.—Aluminous cake, 5d.—Nitrate of Soda: 11s. to 11s. 6d.—Ammonia: Sulphate, grey, 18d. 12s. 6d.; white, 19d.: carbonate, 5d.; muriate, 30d.; sai ammoniae, firsts, 45s.. seconds, 44s.—Potash: Muriates, 80 per cent., at 6d. 5s. to 6d. 7s. 6d. f. cob.; Prussiate, red, 2s. 2d.; yellow, 11½d.; chlorate, 9½d.; bichrome, 4½d.—Iron Saits: Green and rusty copperas, 55s.; in casks or tarrels, 69s.—Copper Salts: Sulphate of copper, 23d.—Litharge: Best flake, 24d. 10s.—Sugar of Lead: Brown, at 23d. 10s.; white, 39d.—Acid: Tartaric, English, at 1s. 6d.; foreign, 1s. 5½d.; oxalic, 5d.; sulphurle, 3d. 10s. to 3d. 15s.; rectified, 6d. 10s.; piorio acid, 1s. 9d. per 1b.—Arsenic 112d. 15s. to 1d. Magnesia: Epoom salts, 3d. 17s. 6d.; refined, 4d. 10s.—Esparto: Oran, fair to best, 7d. to 7d. 15s.; Susa, fair to good, 8d. 5s. to 8d. 15s.; Spanish, fair to best, 10d. 15s. to 11d. 10s. per ton; Tripoli, good ordinary, CHEMICALS, MINERALS, AND METALS. - (Messrs. J. Berger Spence

to 6l. per ton.—Brimstone: Best thirds, 6l. 15s.—Resig , 9d. per cwt.; medium, 5s. 9d. to 6s.—Globe steam boiler casks.—Phosphate of Alumina, 3l. to 3l. 10s. per ton.—D. 4s, 9d. per owt.; medium, 5s. 9d. to 8s.—Globe steam bolier powder, 2s. in casks.—Phosphate of Alumina, 3t. 5s. 4t. 0s. per ton.—Pyrites: Span ous, 5½d.; non-cupreous, 6½d.—China-clay: 15s. f.o.b. Cornwalt; bear 24s.—Phosphates: High strength, 80 to 85 per cent., 1s. 4d. to 1s. 5d., 70 per cent., 3s. di, to 1s. 5d., 70 per cent., 5d. 15s.; super-phosphates, 80 per cent., as oluble, 3s. 6d. per Hematite, 5d. 15s.; super-phosphates, 80 per cent., as oluble, 3s. 6d. per Hematite, 15s. to 22s. 6d.; colitio, 8s. to 10s.; Algerian, 50 per cent., 2s. No. 4. (forgot, 4s. net cent., 2s. No. 4. (forgot, 4s. net cent., 7s.), 1, 5s.; No. 4. (forgot, 4s. net cent., 1s. centra four mon Sectoh pig (warrants), 5ss. 6d.—Staffordshire bars, 8d. 10s. to 10t; though cases of the 9d. 10s.—Copper: Chili bars, 7t.; B. 8. ingot, 8d.; tough cases Straits, 7t. 1ss.; British, 7st.—Tin plates: Best charcoal, 2ss. 6d.; best per box.—Lead: Best English soft pig, 22t., delivered at Manchester—4s English, 28t. 10s.; English, 24t. 10s.—Sh. English, 28t. 10s.; Elissian, 24t. 10s.; English, 24t. 10s.—Sh.

## Original Correspondence.

## PESTARENA UNITED GOLD MINING COMPANY.

PESTARENA UNITED GOLD MINING COMPANY.

Sir,—Shareholders, who through being disheartened by year of disappointment resulting from the will-o'-the-wisp nature of the gold-producing ores in the veins of this district and the great disculties attending the extraction and separation of the precise metal, will appreciate the kindness of "A Shareholder's companied to the improved state of companied to the separation of the precise separation of the properties, his certainly to be hoped that the "long lane" has at length readed its "turning" point, and that the favourable results now being effected under the auspices of the present distinguished management will be only a precursor to more extensive and remunenture returns. I have on several occasions sought information from the present managers—Messrs. John Taylor and Sons—on the prospects of these mines, and have been buoyed up by their assurances the although the operations hitherto carried out have not realised their anticipations, yet these disappointments assumed more of the character of a regret that in consequence of the "original works" at having been planned in conformity with the (may I write "first") racter of a regret that in consequence of the "original works having been planned in conformity with the (may I write "first") principles of scientific mining, considerable difficulties had to be encountered from time to time, which necessarily delayed the one pletion of the incline shaft, from the completion of which progressive work so much was hoped for by the engineers in charge. Now the rich strata of gold-bearing rock are tapped at the bottom of the Pestarena Mine—the expenses of exploring and raising the orestfun which had hitherto absorbed all the profits—I trust that the result will exceed our most sanguine expectations, that the small amount of debentures subscribed for be soon paid off, and Pestarena, with the splendid Val Toppa, will be again ere long in the divident paying list. Already I find enquiries are being made on changes specting our shares, and that a considerable quantity have been taken off the market.—City, March 31.

M. E.

[For remainder of Original Correspondence see this day's Supplem

## Meetings of Bublic Companies.

#### THE GREAT LAXEY MINING COMPANY,

The GREAT LAXET MINING COMPANY.

The following reports will be read at the forthcoming half-years meeting of shareholders:—

March 28.—The insular directors have much pleasure in calling the attential the shareholders to the annexed balance sheet and report from the mangers, specting the operations at Great Laxey during; the past half year. The director of opinion that the figures and statements therein contained will prove substactory to the great bulk of Great Laxey shareholders. At the april medic the intention of the directors to bring before the shareholders the necessity of see viding the permanent assistance of a steam vessel by purchase, charter, or other wise, for the purpose of efficiently continuing the delivery of orea when she should be experience to be a matter of great importance and benefitied company. The next dividend will be declared on April 11, the day before the general meeting.—Geo. W. Dumbell, James Spittall, Charles Clearoz.

March 22.—In contemplation of the approach of the April half yearly spend

wise for the purpose of efficiently continuing the delivery of one where has been found by experience to be a matter of great imports and bene company. The next dividend will be declared on April 11, the day be general meeting.—Geo. W. Dumbell, James Spittall, Charles Ciza March 22.—In contemplation of the approach of the April half yearly meeting of the shareholders, we have much pleasure in submitting for sideration the following report of our operations at the mine for the push while the result of our labour has not been exactly what we could will be regarded with satisfaction. According to custom, we mence with a report upon the underground workings, starting from the the deep mine at the engine-shaft. In the 235 we regret to say that up sent no important change for the better has taken place. We still have good stones of ore in the south end; upon the whole, the end is promisin pearance, and we continue to look forward with considerable interest int tion. The north end of this level is poor for ore; it is now within about it he end diving south from the Welsh shaft. In this space of ground expect to meet with much, if any, mineral. The end of this level going as the 220 fm. level, some distance in advance of the 235 end north, and entered thereform north and south in order to facilitate the speed yopening up of length of ground in this direction. We consider this course necessary portant. The winze being sunt 20 fms. north of the Welsh shaft is nearly up to the line of ore ground for about 17 fms, word therefore north and south in order to facilitate the speed yopening up of length of ground in this direction. We consider this course necessary portant. The winze being sunt 20 fms. north of the Welsh shaft is dead to the seven and the start of ground in the 30 north of the Welsh shaft is dead to the contract of the seven of the 125 end north and therefore that, as in the case of the level above. We shall here get a like through the slide got into some nice ore ground for about 7 fms, word the safe has a sev

fathom.

ne end in the 185 north still continues unproductive; the appear of the soon falling the soon falli per fathorn.

Its of the end in the 185 north still continues unproductive; the appearance of the life is not promising, but we are still very hopeful of soon falling in with sombling good in this direction. There are two stopes to the north in the roof of this server, which 40. and 184, respectively. The lode in the 170 end north has been computed in the 190 end north has been steen down so fat, the safe ingorition of the lode will, of course, be properly proved by cross-cust. On opening the protection of the lode will, of course, be properly proved by cross-cust. On opening the protection of the lode will, of course, be properly proved by cross-cust. On opening the protection of the lode will, of course, be properly proved by cross-cust. On opening the protection of the lode worth when had open 500, per fathorn. Five stopes are being wrought upon here, one stope to the north of the reof added the sole, and the winze going down to the 170 worth 384, 154, and 30, per fathorn. Five support of the 190 end reiving north produces a little blende only: the appearance of the state, one winze are being wrought upon here, one stope to the north of the reof added the sole, and the winze going down to the 170 worth 384, 154, and 30, per fathorn. Five also a stope in the 180 end with 180 end end will pass one of wind and the sole end will pass over the stopes in the 185, south of Dumbell's shaft in the side of the dead will pass over the stopes in the 185, south of Dumbell's shaft in the side of the produces at life will be soon by the dead of the side of the produces at life will be soon by the following the side of the side

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diately be started. The improved ventilation will also enable our more readily stoping there of of the 110, where the lode is in place svery rich. About two months ince the 85 north, at Dumbell's shaft, was started to drive over this ground. From since the 85 north, at Dumbell's shaft, was started to drive over this ground. From since the 85 north, at Dumbell's shaft, was started to drive over this ground. From some of o e, which suggests a possibility of the lode being found productive before the new run of ore is reached. Before concluding this description of the unforced workings, we would observe that the ore ground opened in driving the last six months is quite equal to what has been stoped out during levels during the last four months arose from the very unexpected falling off in returns during the last four months arose from the very unexpected falling off in returns during the last four months arose from the very unexpected falling off in returns during the last four months crossed in the very unexpected falling off in return during the last four months.—Gien Adit Cross-Cut: No lode having been intersected sine about a month.—Gien Adit Cross-Cut: No lode having been intersected sine the last haff yearly meeting, we think the cross out is sufficiently extended the last haff yearly meeting, we think the cross out is sufficiently extended westerly, and that it is now advisable to prove the joints already passed through by driving on their course a little, it being quite possible one or other of them may be the lode nipped, or contracted, at the point of intersection of the further extension of cross-cut may advantageously be deferred until these points are tested. A good average amount of labour amount of the further extension of cross-cut may advantageously be deferred until these points are tested. A good average amount of labour amount of the machinery throughout the mine in good repair on the further extension of cross-cut may advantageously be deferred until the kingle on a cross that the para well ma

... ... £ 52,143 12 10 43 1 4= 1,543 1 4 610 13 11 622 14 0 613 4 6 150 18 8 90 2 0 20 15 0 to avoid discounting any acceptances)
Dividends unpuid
Due and chargeable for ore freights, insurance, &c. 

#### MINING NOTABILIA

TEXTRACTS FROM OUR MINING CORRESPONDENCE.1

LANRHALADR (Lead) —The agent reports that good progress is being made with the driving of the deep adit level at this mine, and the end must be fast approaching the ore ground. It is now only 14 or 15 fms, behind the winze sunk telow No. 4 level, from which a most important discovery of lead was made some time ago. A pircel of 4 tons was sold last week, realising 14. 10s, per ton, and further sales are expected very shortly. A very little time should now suffice to bring the deep adit level under the ore, when the proprietors will, doubtless, have a great and lasting mine, with rich reserves of ore for some years. The shares are nown that (2.1), and investors will do well to consider the merits of this property, which contrast well with some the shares in which have been selling at goed premiums.

of premiums.

EAST CARADON.—This mine has been a disappointment to many. The agent's

perty, which contrast well with some the shares in which have been selling at good breniums.

EAST CARADON.—This mine has been a disappointment to many. The agent's report in last week a Journal gives little or no encouragement to the shareholders. Wiy do not the agents give more information in the Journal of the operations and as to the value of the atopes, &o.? They will, no doubt, furnish a fuller, and, of cares, a more encouraging report at the meeting, early next month. The shareholders are not information worthy of noti-e.

WEST MARY ANN (Menhenist).—It is reported that the miners have met during the lot few days with the Wheal Mary Ann lode, which is of a promising character. It is anticipated that the lode will prove valuable from present indications, and, if such should be the case, the concern will be worthy of notice: and even man, if such should be the case, the concern will be worthy of notice: and even man, if such should be the case, the concern will be worthy of notice: and even man, if such should be the case, the concern will be worthy of notice: and even man, if such should be the case, the concern will be worthy of notice: and even man, if such should be the case, the concern will be worthy of notice: and even man, if such should be the case, the concern will be worthy of notice: and even man, if such should be the case, the concern will be worthy of notice: and even more productive in depth, and I non-classion, I am desirous of reasouring the adventurers that they will be rewarded for their outlay and patience. The indication in the shallow levels always induced me to believe that the mine would become more productive in depth, and I am pleased to say that recent improvements conflow that opinion. Considerably more are ground is being laid open than can at present be advantageously taken away, yet sufficient can be returned to admit of a vigorous prosecution of all the important polices of operation without calling upon the shareholders for assistance, and I am pleased to say that recent me

IMPROVED SAFETY CAGE.—The improved apparatus invented by Mr. N. Libotte, of Gilly, Belgium, instead of causing the more or less sudden stoppage of the cages, as heretofore, by the clutches penetrating into upright guides for the cage, effects the arrest of the cage by means of wedges forced between their guides and the upright guides.

#### FOREIGN MINES.

ST. JOHN DEL [REY. Telegram: Morro Velho, March 30: Produce eleven ays, a cond divison of March, 18,000 oits, 69730.; yield, 9 0 oits, per ton. DON PEDRO.—Telegram from Rio, March 24: Produce cleaned up (first division March) 700 oits; underlie lode small and poor; sinking resumed. Line in lanoa will be resumed at once.

one will be resumed at once.

LONDON AND CALIFORNIA.—The result of the clean up at the Original
major Mine for the mouth of February is as follows:—Receipts, \$23,007.15; ex-

Jamaior Mine for the month of Peirsary is a follows.—Receips, \$23,007 Lb; exports, \$20,007 Lb

the lode is 3 ft. wide, composed of quartz. In the 90, east of the same shaft, the lode is 2 ft. wide, composed of quartz, mundic, and country, with spots of copper ore and cobalt. In the 70 east the lode is 2 ft. wide, composed of schist, quartz, and spots of lead; and in the 28, going in the same direction, the lode is 4 ft. wide, with a branch of ore worth 3 ton per fathom. In the 50, west of the slide lode, the lode is small, but the wall is regular.—Mill Lode: The lode in the end of the 70, east of River shaft, is quite out of the Mill lode order, and now underlies south; consequently we are come back to Batch is lode again, and find another wall to the north, which may be the right one. The cunter lode in the 150, west of Taylor's, is 2 ft. wide, composed of quartz and stones of ore. At Carvalhal the branch in the 60, west of the cross-cut and south of incline shaft, is in rather harder ground; it carries a regular wall, but is small and without mineral.

in rather harder ground; it carries a regular wall, but is small and without mineral.

ALAMILLO3.—March 22: The 60, west of San Francisco shaft, has somewhat improved, the lode yielding 2 tons lead ore per fathom. The lode in the 40, west of San Felipe shaft, contains a little ore. The 50, cast of La Magdalena shaft, continues in a lode producing 3 tons per fathom. In the 85, at San Enrique shaft, the men are driving northto intersect a lode standing in that direction. The same level, west of San Adriano's shaft, is in a large lode spotted with lead, worth ½ ton per fathom. The 50, east of San Victor's, is in a strong and valuable lode, yielding 3 tons per fathom. In the 60, east of this shaft, the lode is poor, and the granite hard. In the same level west the lode has improved a little in appearance. The lode in the 40, west of San Carlos, is small and unproductive. The 40, east of Air shaft, continues to open productive ground, worth 1 ton per fathom. The 50, east of Crosby's, is in a small and poor lode. The same level, east of Judd's cosgine-shaft, is also without ore to value. The lode in the 50, west of Judd's cosscut, is larger, and has a better appearance. The 60, east of Judd's, is without cre to value. Fair progress is being made in the 70 oross cut north of this shaft. The

driving of the 35, west of Swaffield's, is suspended. The lode in the 30, west of adit, is a little more valuable, producing I ton per fathom. Taylor's engine staft, below the 85, is in very hard granite. Cox's shaft has communicated with the 80 fishing of Bigge's staft, below the 20, is being pushed on as fast as possible. In Sunta Tomas shaft the men are making good progress. Martenez winze has communicated with the 80, six being pushed on as fast as possible. In Sunta Tomas shaft the men are making good progress. Martenez winze has communicated with the 80, Juan's winze, below the 25, maintains its former value—3 tons per fathom. Reca's winze, below the 25, will shortly communicate with the 40, the lode yields 2 tons per fathom. The water in Figure's winze, below the 30, impedes the sinking, the lode yields 1 ton per fathom. In Marta's winze, below the 80, is poor. In Fecunda's winze, below the 80 of Addis's cross cut, is in a lode worth 1½ ton per fathom. The lode in the 30, east of San Carlos shaft, is disordered. In the 40, west of Abercombile's shaft, the lode is not so large as it was, but yields 1 ton per fathom. In the same level east the lode is small at present. The 60, west of San Pedro, is still in hard and spoor ground. In the 60, east of San Frederico, the lode is large, containing quartz, with a little lead ore. The lode in the 110, east of Addis's shaft, is in a large well-defined lode, worth ½ ton per fathom. The lode in the 110, east of Addis's shaft, is in a large will defined, and contains mor lead, but not sufficient to value. The 90, east of 20 caro's, is passing th

winze, below the 4, is worth ½ ton per ration; in consequence of a large mux of water this winze has been suspended. Savio's winze, in the 100, east of San Pablo's shaft, and in advance of the 110 fathem level, in sinking in a lode worth 3 tons per fathom.

LINARES.—March 2: Pozo Ancho Mine: The 100, east of Warne's engineshaft, is in a large, strong lode, producing 1 ton of lead ore per fathom. The lode in the 85, west of Crosby's, is very open, and letting out water freely. In the 90 cross-cut, south of Peill's engine shaft, good progress is being made. The lode in the 85, west of Peill's, is small and poor. In the 55, west of this shaft, the lode is improving a little, and yields ½ ton per fathom. The lode in the 90, cast and west of San Francisco shaft, yields 1 ton per fathom in each end. The 75, east of this shaft, is opening up a good length of tribute groundworth 1 ton per fathom. The lode in the 65, east of the same shaft, is very irregular, and yielding occasional stones of ore. No. 205 winze, sinking below the 65, is in a promising lode, worth 1 ton per fathom. No. 206 winze is going down in a lode producing 2 tons per fathorm.—Quinientos Mine: The cross-cut in the 90, south of Taylor's engine-shaft, is in very hard granite. In the 89, west of this shaft, we have intersected the lode on the western side of the cross-course, which is spotted with ore, and letting out water. In the 45, east of Cox's cross-cut, the lode is very small, and quite poor. The lode in the 80, east of Taylor's, is improving, and produces ½ ton per fam. In the 65, east of this shaft, is opening up tribute ground, worth 1 ton per fathom. The same level, west of Henty's, is easy for driving, but he lode is disordered and poor. The 65, east of this shaft, is popening up tribute ground, worth 1 ton per fathom. The same level, west of Henty's, is easy for driving, but he lode is disordered and poor. The 65, east of this shaft, the lode is disordered by a strong cross-joint. The lode in the 45, east of Judd's shaft, has fallen off bo

The following reports were received too late for insertion in its proper place:

The following reports were received too late for insertion in its proper place:

LLANRHAIADR.—Capt. E. Pasco, March 30: In the deep adit level the ground is more favourable for driving, and greater progress is being made. West of winze, below the No. 4, we have reached the north part of the lode or hanging wall. I have now set the men to drive west on the north part of the lode. We have not taken down any of the lode since the wall was reached: I shall do so in a day or two, when I will let you know how it looks. We have agood mixture of ore standing in the east side of the cross-cut. The stopes over Nos. 3 and 4 levels are yielding their usual quantities of ore; worth each about 56, per fathom.

NEW CONSOLS—R. Pryor and Son, T. Jenkin, H. Vial, March 29: The underground bargains continue to yield their usual quantities of rich quality ores, and no change has taken place worthy of notice since our last report. There will be 38 chambers of the arsenic refinery works completed this evening, and if the weather proves fine the whole 48 will be by the end of the week. The tubes for Oxland's calciners are on the works, and the pulrose for the water-wheel for driving them will be finished on Friday next, and no time will be lost in getting these very important machines to work. All other surface work is being pushed on with speed. Since the reverberatory furnaces have underground repair they have began to burn much better.

The West Prussian Mining Company (Limited) has issued the rarrants for the usual interim dividend upon the preference shares at the rate of per cent. per annum, for the three months ending the 31st inst., payable April 1.

#### COPPER ORES. Sampled March 8, and sold at the Royal Hotel, Truro, March 23.

Tons. Pric 61 .... £3 9 51 .... 4 15 9 5 .... 2 0 8 .... 2 3 0 .... 1 19 0 0 .... 4 8 6 5 10 6 6 6 0 6 3 6 18 Mines. Mines. on Great Consols.. Tons. Marke Val ditto ditto ditto Hingston Down ...
ditto
ditto
Glasgow Caradon Glasgow Caditto ditto ditto ditto vislake (Clitters)... Bro ditto ditto ditto ditto East Caradon ..... Wheal a ditte ditto ..... eal Russell ... mbroke ..... ditto .......

Bedford United .

Belstone ditto ..... ditto ..... ke Valley ... TOTAL PRODUCE.

 
 £1281
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 Brookwood
 170

 2854
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 East Caradon
 125

 1619
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 Wheal Russell
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 707
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 New Pembroke
 100

 1523
 11
 0
 Bedford United
 68

 1697
 6
 6
 Belstone
 50
 South Caradon 450 .....
Marke Valley 416 .....
Hingston Down 270 ....
Glasgow Caradon 260 ....
Gunnislake (Clit.) 251 .... 

COMPANIES BY WHOM THE ORES WERE PURCHASED.

| COMPANIES BI WHOM THE ORES WERE PURCHASED. |
Names.	Tons.	Amount.		
Vivian and Sons.	618½	£2888	9	6
Grenfell and Son	359½	1910	2	6
Nevill, Druce, and Co.	388	1688	10	0
Williams, Foster, and Co.	472½	2544	9	0
Mason and Elkington	651	2371	8	6
Copper Miners' Company	360½	1306	18	0
Charles Lumbert	216	826	4	0
Newton, Keates, and Co.	139	737	8	0
Sweetland, Tuttle, and Co.	289½	1308	7	0
Total ...... 3486 ..... £15,381 16 6				

NO SALE on Thursday last, March 30.

Devon Great Con.1233 ...

NU SALE on Thursday last, March 30.

Copper ores for sale at Tabb's Hotel, Redruth, on Thursday next—Mines at darcels.—Crenver and Abraham 495—West Tolgus 390—Carn Brea 209—South rofty 196—Wheal Basset 142—East Pool 117—East Basset 96—West Basset 88—last Generille 14—New Rosewarne 14—St. Agnes Consols 13—Wheal Grenville 10—outh Toloarne 9—South Polmear 9.—Total, 1772 tons.

#### Mining Correspondence.

#### BRITISH MINES.

ABERDAUNANT. - 8. Toy, March 29: In No. 1 adit the men are making fair progress in driving it east; the ground is not so hard as it has been, and letting out more water; the lode is producing a little lead, but not unflicient to value. In No. 1 adit level, driving east, the lode is large, and worth 6!, per fathom for lead. BLUE HILLS - 8. Bennetts, A. Gripe, March 25: The ground in the engine-shaft below the 75 continues favourable for sinking, and letting out but very little water. A small gossan or two which have just been passed through have not moved the lode so far as can be seen. In the tribute department there is no change to notice.

The continues of the season of the season of the continues to seek. Bawden, jun., March 25: I am glad to say that the pitch in the 90 east continues to yield good ore, and gives good promise for the future. The ground in the engine-shaft has lately proved very lard, and consequently the sinking has been progressed with rather slowly. The lole in the 90 we-t has slightly improved during the last week, but the ground is very heavy, and requires a great quantity of timber to keep it open. The 90 east gradually improves, and before long I expect to see here a good course of ore. At Taylor's we have to day succeeded in getting the lifts into the cistero, and are now ready to resume the sinking. At Amy's we have not yet met with the lode at the 40 north cross-cut, but expect to reach it shortly. In the lead house we have 22 tons of clean ore, or thereabouts, ready for sampling. All the machinery is in excellent working order.

we have to day succeeded in getting the lifts into the elsetre, and are now result to resume the sinking. At Amy's we have not yet met with the lode at the 40 north erose-ent, but expect to reach it shortly. In the lead house we have 22 tons of clean ore, or thereabouts, ready for sampling. All the machinery is in excellent working order.

CEN TRAL VAX.—H. Francis, March 30: The No. 2 caunter lode has been of a promising character for some time, and it is still more promising to-day, the footwall of lode having altered its underlay from 3 ft. 10 in. per fathom 1 ft. 6 in. per fathom. This is a change of importance, and I look upon it, together with the general character of the lode, as more encouraging than any thing seen hitherto in this lode, which from the commencement of the drivage up to now has main tained the same underlay of 3 ft. 10 in. per fathom. In the shaft, sinking on No. 2 canneter lode, we have gone through some nice ribs of spar, carbonate of lime, and a little salphur, accompanied with water. Here also the lode does not underlay so fast as it did. Its present underlay is about 2 ft. per fathom (about the average underlay of the Van Iode). The ground having become wet, I intend using dynamite, which will be more effective in such ground than powder.

CEENVER AND WHEAL ABRAHAM UNIEED.—W. Thomas, J. Hammill, March 29: Sturt's Engine-Sh.ft: The 238 to drive west by eight men, 1 fm., or the month, at 14, per fathom; the lode is 7 ft. wide, yielding copper ore to dress.—W. olf's Shaft: To drive a cross-cut at the 208, by two men and two boys, I fm., or the month, at 14, per fathom; there we have intersected some small branches, but neither of them to value. In the 220 west (which is set on tribute), the lode is 45½ ft. wide, and will yield 2 tons of copper ore per fathom. In the 208 west, an invest of cross-course (which is also set on tribute), the lode is 41¢, wide, and will yield 2 tons of copper ore per fathom. In the stope was to the winth anything to notice.—Blewitt's half, is drived, and will

ons of lead ore in the the course of the week. All the pitwork is in good workgorder.

CWMYSTWITH.—March 20: The lode in the west end of Michell's level has
allen off in value, although the lode is quite as strong as we have seen it at any
ince. The reason we have suspended the driving east at Michell's level for the
resent is that we are obliged to take off a few of the air-pipes, so as to enable us
o start the cross cut north, but will resume the driving as soon as we can make
hings safe. We are making fair progress in driving the Rosa cross cut, and calcutet that we have about 12 fms. more to drive before we cut the new lode. All our
nachinery is in fair working order, and we are pushing on with the dressing as
ast as possible, and shall sample 20 tons of ore on Tuesday. March 25:

DE BROKE.—J. Philips, March 25: Wilson's Engine Shaft: We are making
ar usual progress towards the 35 fm. level. We have holed the rise above the 25
cith the winze below the shallow adit. At the point of meeting the lode is worth
55, per fathom. The completion of this communication has improved the venttion and facilities for working. In the 25, driving east, only a portion of the
olde his yet been taken down. So far as ascertained, I estimate its value at from
the to 30th, per fathom. The lode in the stope west of junction is wide, and the
re patchy and variable, but on the average will produce 12 cwts. of lead ore per
tabom, and rather improving.

DEVON CREAT CONSOLS.—March 31: Wheal Maria, Gard's Engine-Shaft:

thom, and rather improving.

DEVON GREAT CONSOLS.—March 31: Wheal Maria, Gard's Engine-Shaft. DEVON GREAT CONSOLS.—March 31: Wheal Maria, Gard's Engine-Shaft: In the 50 west, on the north part of the lode, the lode is 3ft wide, consisting of quartz, mundic, capel, and produces occasionally good stones of ore. In Jackman's rice, in the back of the 25 west, the lode is still worth 1½ ton of ore, or 10/1 per fathom.—Wheal Josiah, Richard's Engine Shaft: The 60 west is communicated with the workings at Wheal Anna Maria. The lode held good up to the period of holeing; worth 2 tons of ore, or 5f per fathom. A cross-cut will now be put out south for the intersection of the south part of the lode.—Wheal Emmt, Thora as Engine-Shaft: In the 216 east, the ground is tolerably favourable for progress. Driving east is suspended for the present, and the men are put to drive south for proof of size and character of the lode. The lodein Staddon's rise, in the back of the 60 east, is still worth 7 tons of ore, or 3f. per fathom.—New Shaft, New South Lote: This shaft is in regular course of sinking below the 169, and the

broke nice stones of ore in the country rock in the shaft to-day. Becross cut is still driving north and showing spots of lead, but not sufficient to value. The 25 has been extended west of cross-cut 4 fms. in the hanging of the lode. The end is very hard and sparing for driving: worth for lead 10%, per fathom. I am glad to see the ground getting harder. We cannot expect much riches on the south part of the lode at East Van, more than at Van, unless it is a branch; therefore I think our best plan is to turn into the soft, and drive quickly along it until we get opposite it, when we shall cross north through the lode. To accomplish this we have 12 fms.

hard and sparring for driving: worth 107 1803 105, per fathorn. It am gets to set the ground extinge and existing hard. We cannot expect much riches on the south part of the lode at East Van, more than at Van. unless it is a branch; therefore 11think our best plan is to turn into the soft, and drive quickly along it until we get opposite the lode at East Van, more than at Van. unless it is a branch; therefore 11think our best plan is to turn into the soft, and drive quickly along it until we get opposite the state of the love of the lower than the plan of the lower to drive.

EAST WHEAL BASSET.—Richard Pryor, Edward Adams, March 29: No meteorothy change has taken place throughout this mine since last week's report.

GOGINAN AND LEVEL NEWYDD.—March 28: Bryn Plea shafthas attained dividing of the same to that depth, and driving westward will now quickly become menced. The western shaft is down deep enough for the 120; the same is nearly completed the easing and good account of the lote. We are again getting through the hards of the lote of the same in more and in the ore ground in two 'or three days. The 110 will be cleared and repaired in the source of a same has possible on the removal of the engine, about their usual quantities of ore. The surface work is being carried on regularly, and they remove the course of a same of the proper opening out of the ore ground. &c. The tribute pitches are looking much the same, producing about their usual quantities of ore. The surface work is telling carried on regularly, and they remove the proper opening out of the ore ground. &c. The tribute pitches are looking much the same, producing about their usual quantities of ore. The surface work is telling carried on regularly, and they remove the carried on regularly, and they remove the proper opening out of two days, when we shall start a winze below that level to the source of a solution. The first of the new than the proper opening out of the lock of this level, bedries and solution. The first of the new than the proper op

been hitherto done in this direction in any of the upper levels. The 68 keeps rather poor, but is occasionally yielding good stones of ore. There is a great probability of this end proving productive again. The pitches, on the whole, are similar to their condition last month, and are yielding good ore. We have in store 17 tons of clean ore, and by the end of next week we expect to have 20 tons in store. All the machinery is working well.

GREAT WEST VAN.—W. Bramwell, March 29: I have much pleasure in being able to inform you that Eliza's shaft is down the required depth to commence a cross-cut south. I have set a contract for the shaftmen to drive the cross-cut for the month at 94. 10s, per fathom, and to land their own stuff; after they have driven in for about 2 fms. I shall put them about timbering up the shaft, and to fx ladder, road, &c. The 46 west, to four men, at 94. per fathom, and to train their own stuff; this end is in a very promising lode for about 5 ft. wide, looking kindly for further improvements. A rise in the back of the 48, to four men, at 84. Its per fathom until gone through; I expect this will be communicated in three or four days from this date. As soon as this is completed, I shall put these pare of men to commence stoping in the back of the 48 in a lode worth upwards of 1 ton per fathom; other stopes will be resumed in the course of a few days. A contract to six men, to strip down by the side of the old pass for about 5 ft., at 84. 10s. per fathom. The rise in the back of the 84 north cross-cut is in a strong lode for about 8 ft. wide; yielding good stones of blende, and branches of lead ore, a very kindly looking lode, and in the whole ground up to surface gaining good backs in going est. In the eastern part of the sett, the men are busy opening upon the back of the lode in search of more lode in going westward, as the lode we have been working upon is losing backs considerably, through going south of west so much.

GUNNISLAKE (Clitters).—Wm. Skewis, J. O. Seccombe, March 28: The lode

HINGSTON DOWN CONSOLS.—J. Richards, March 30: Bailey's Shaft: In the 160 west the lode is large, 5 ft. wide, and produces a little of both tin and copper ores. In the 150 west the lode is 3ft. wide, consisting of quartz, capel, peach, and a little ore. In Rowe's winze, sinking below the 150 west, the lode is 4 ft. wide, and worth for length carried (10 ft.) 5 tons of ore, or 15t, per fathom. In Nicholi's winze, sinking below the 150 west, the orey part of the lode is 4 ft. wide, and worth for length carried (10 ft.) 15 tons of ore, or 70. Per fathom. The lode in the stope in the bottom of the 150, west of Rowe's winze, is still worth 6 tons of ore, or 24t. Per fathom. The lode in the two stopes in the bottom of the 150 west, east and west of Nichol's winze, continues worth on an average 8 tons of ore, or 28t. Per fathom. The lode in the two stopes in the bottom of the 150 west, east and west of Nichol's winze, continues worth on an average 8 tons of ore, or 15t. Per fathom. In the 140 west the lode is 3 ft. wide, composed of quartz, capel, mundic, peach, prian, and some black oxide of copper. The lode in the stope in the bottom of the 120 west is worth on an average 3 tons of ore, or 9t. Per fathom: In the 140 west the lode is 3 ft. wide, or 12t. Per fathom. The lode in the three stopes in the bottom of the 120 west is worth on an average 3 tons of ore, or 9t. Per fathom: and in the stope in the back of the 110 west the lode is also worth 3 tons of ore, or 9t. Per fathom.

ILLOGAN.—Richard Pryor, March 28: The ground in the addit level, south of engine shaft, is still spare for progress, it being intermixed with spar, and letting out water freely.

LADYWELL—A. Waters. March 30: I have just received word that the 32.

nut water freely.

LADYWELL.—A. Waters, March 30: I have just received word that the 32, touth of engine-shaft, is up to five junction of New Britain lode. Hope to get hrough this lode into main lode south by to-morrow, when I hope to be able to report on our prospects there. No. 1 stope, in 16 fm. level south, is worth ½ ton end or per fathom. No 2 stope, south ditto, is worth ½ ton per fathom. The

report on our prospects there. No. 1 stope, in 16 fm. level south, is worth ½ ton lead ore per fathom. No 2 stope, south ditto, is worth ½ ton per fathom. The stope in back of adit south is worth 1 ton per fathom. EtaNNIDLOES (Lead).—J. Kitto, March 25: Our prospects have considerably improved during the past month, but more particularly within the last few days. The bottom end east never looked so well for a permanent yield as it does at present, being worth over a ton of lead to the fathom, and the appearances are much in favour of further improvement, but the end is so very wet that no great progress can be made at present with the driving. I hope, however, that the water will soon be drained down, and that we shall be able to push on more rapidly. Another most important feature is the intersection of the north part of the lode in two cross-cuts, one at the 45 and the other above. This part at each point of intersection contains good ore, worth from 10 to 15 cwts. to the fathom, and ap p ars so far to have been altogether negle ted in the previous working of the mine, and so far as can be seen at present will in all probability be found standing whole in the side of the levels for the full length of the mine west of the engine shat, and for some distance to the east of same. I have started two other cross cuts westward for the purpose of proving it fully in that direction, and as soon as the bottom end east is a little further advanced I purpose cross cutting north in that level also. I regard this as being a most valuable discovery, and something that will undoubtedly prove of considerable interest in the future working of the mine. We have cleared and repaired the 45 west to the present end, but before resuming the driving his that direction I purpose cross-cutting lode in several places in order to ascertain its full size and value, and one cross-cut has already been started. I have nothing else new to mention, but have no hesitation in saying that if our prospects continue to improve as they have of late

but time must be allowed for opening out new ground before much ore can be raised.

MARKE VALLEY.—J. Stenlake, F. Renals, March 30: In the 112 cross-out we are through the lode, and shall commence to drive east on the leader part without delay. In driving east at the 30 from cross-cut the lode is worth 5 tons per fathom. The lode in the 20, driving west, is presenting a more promising appearance. All cther points of op-ration are without change.

MELIN DUR VALLEY.—J. Kitto, March 23: There has been no change of importance in the mine since the date of my report for the general meeting of the shareholders. The shaftmen have been engaged for the last fortnight in putting down new pitwork and re arranging the old, consequently nothing further has been in: but this work has been completed, and the pumps set to work, and I expect the mine will be again clear of water by Saturday next. The 14, driving each, has been jelding ore all the month, and is altogether a very kindly end, but

r sale on April 5.

NEW PEMBROKE -F. Puckey, Chas. Merrett, March 27: At the 120, east of

Iff, the lode in the end is from 4 to 5 ft. wide, a very strong and wellcontaining a little tin, and looking promising for an early improvsame level driving west of the shaft the lode is 2 ft. wide, but unr mineral. In the 110, driving east of the shaft, the lode is 2 ½ ft.
2 awing work for tin, and occasionally stones of good copper one,
the back of the same level behind the end the lode is 3 ft. wi-le, and
fathom. In the stope in the back of the 110, cast of the shaft, the
ide, worth 10¢, per fathom. At the 10¢, driving east of the shaft, we
consure in stating the lode is very much improved in value for copper
or consure in stating the lode is very much improved in value for copper

present sman, our for improvement.

Vivian, March 30: The lode in the 40 is 1 ft.

Its copper ore, and we consider there are good prospects for improvement. NEW NORTH POOL.—W. C. Vivian, March 30: The lode in the 40 is 1 ft. wide, yielding chlorite, with yellow copper ore disseminate: throughout it. Its appearance has improved since may last report, and it is becoming easier for driv-ing through. The country or rock adjacent to it on the south is also mineralised with conper and wolfram.

at 4l. perfathom; lode worth 7l. per fathom for copper. To stope the better same, by four men, at 4l. per fathom; lode worth for copper 6l. per fathom. OLD TINGROFF CONSOLS.—James Pope, March 30: In the 30, west of the theologies is 16 in. wide, producing average quality tinstone. In a rise in back of the 10 de is 18 in. wide, producing good work for the stame. In a rise in back of the 10 de is 18 in. wide, producing good work for the stame. In a rise in back of the 10 de is 16 the 10 de is 16 the 10 de per fathom. A stope in back of the 30, cast the 10 de is 16 the 1

the usual prices. You will observe by the above that the stopes are not generally well as they were.

PEDN-AN-DR CA UNITED.—Wm. Tregay, W. Prideaux, J. Pope, March 2. Sump: In the 180 west end the lode (Martin's) is worth 10f. per fathom, and issuing promising for improvement. In the 150 west end the lode (Martin's) is worth 10f. per fathom, and issuing promising for improvement. In the 150 west end the lode (Martin's) is worth 10f. per fathom. In the 140 there is nothing new to report; we have been ensithed the state of the per fathom. In the 150 west end the lode (Martin's) is now worth of the per fathom. In the 150 west end the lode (Martin's) is now worth sinking below the 130 the lode is large and promising, yielding about 8, sent of tin per fathom. In the 150 west end the lode (Martin's) is now worth 10f. per fathom. In the 150 west end the lode (morth) is worth 10f. per fathom. In the 50 west wing the lode (north) is worth 18f. per fathom. In the 50 west wing the lode (morth) is worth 12f. per fathom. In the 50 west end the lode (morth) is worth 12f. per fathom worth 20f. per

wes week soon in s soon That we soun 30% fath mot T day with 86% I ginn The over well fath a well a well a with impa with impa with impa with impa well impa with impa well impa with impa well a well

quantities of tin, authough and rich for the tin.

PENNERLEY.—W. T. Harris, J. Delbridge, March 28: Engine-Shift: lags.

PENNERLEY.—W. T. Harris, J. Delbridge, March 28: Engine-Shift: lags. PENNERLEY.—W. T. Harris, J. Delbridge, March 28: Engin 130 west the lode is small, and contains no leaf to value, and is for pended, and the men placed to drive this level east on the Big Ore is are very promising indications, and the lode yielding some good at We have about 3 fms. to drive to reach the run of ore in the 120, a forward as fast as possible to reach that point. The lode in the 13 tons of lead per fm.—The branch referred to as affecting fielded to reduce it much. The lode indicates very favourably, and is og The lode in the west end is 1½ ft. wide, worth 20, per fathom, with of an improvement. We have resumed driving the 100 east, or which is about 1 ft. wide, yielding some good stones of lead or which is about 1 ft. wide, the number of the 120 east. So fathom level west is 1 ft. wide, containing a little ore; in containing the containing a little ore; in containing the proventer on of ore ground which has gone down in the The lode in the winze sinking below the 70 is 3 ft. wide, worth 2 ton This stope west of winze is worth 2 tons of lead ore per fathom. The productive, and for the present suspended. We have in this see eight tribute pitches—five set at 7.1, per ton and three at 84, per for This shaft will be sunk to the 90 by the end of the week; we shall through the Big Ore lode to the north lode, and so communicate sinking below the 75; this we hope to complete by the end of next means the 55 west is going down in wish lode, worth 55 in the set of the 50 west is going down in which lode, worth 55 in the set of the 50 west is going down in yield lode, well the 50 west is going down in yield lode, well the 50 west is going down in yield lode, well the 50 west is going down in yield lode, well the 50 west is going down in yield lode, well the 50 well to 50 well the 50 well to 50 well the 50 well the 50 well to 50 well the 50 well the 50 well to 50 well th

RELISTIAN CONSOLS

RELISTIAN CONSOLS

otice in the mine since last reported,

ROMAN GRAVELS,—A. Waters, March 30: The

coman lode, is down 5 fms. 3 ft. The n-w south engin

The winze below the 65, in front of the

The winze below the 65, on east lode, is down

ordinged herein 3

ROOKHOPE.—Mr. Blenkiron, March 28: Last Thursday ting. Four men driving on back of adit level west, at 50s. pc ROOKHOPE.—Mr. Henkiron, Marcu es: 1428.

ting. Four men driving on back of adit level west, at 50s. per steping ground worth 10 cetts, of ore per fathom; size carried men rising in back of the 15, at 28. 15s. per fathom, worth Four men stoping in back of the 15, at 28s. per fathom, worth of Ground: Four men stoping in back of the 15, at 28s. per fathom. Four men driving the 26 forehead, at 25s. per fat up to boundary; set to rise for stoping, at 40s. per fathom, we rour men stoping and driving in back of the 25, at 28s. per fathor for the 15s. men stoping in back of the 25, at 28s. per fathor. Sim men shaking shaft, as per contract let be fathom: When we shake the hereafted the forward opening the 42.

itable ground laid open.

SAINT PATRICK—Wm. Francis, March 29: The 60 yard level north, into thert, moves on speedily, with fine indications, and good bearing measure. I little improvement has taken place in the 90 yard level north, into hisk lies stone. The cross-course is again opening, and I expect soon to have better great for driving. The progress altogether is satisfactory.

SNOW BROOK.—T. Owen, March 28: I am pleased to say that the ore is listed of the 12 is equal to what it is the end, which will produce 1½ ton tother distinction. We have not yet cut it through, but intend doing so.

SOUTH CARN BREA.—W. Rich, J. Knotwell, March 29: We have held it winze communicating the 150 and the 164 east; this has given good resulting and opened out ting ground for stoping. The 175 west is in a large promising lode, but at present it only carries spots of copper. The 164 and now be arged on east of the cooper over; the same remarks apply to the lode in the rise above this lied.

ance since the date of my last report has been an improvement in the great south lode, which has been hitherto known as the "great north underlie lode;" south lode, which has been hitherto known as the "great north underlie lode;" south lode, which has been hitherto known as the "great north underlie lode;" south lode, which we have also some saving stuff for lead in the winze sinking below the top level on We have also some saving stuff for lead in the winze sinking below the top level on We have also some saving stuff for lead in the winze sinking below the top level on two leads of the property, is also looking more kindly; but there is from the restern part of the property, is also looking more kindly; but there is from the restern part of the property, is also looking more kindly; but there is from the restern part of the property, is also looking more kindly; but there is from the restern part of the property. It is also looking more kindly; but there is gressing steadily, and on the while in a satisfactory manner, and our prospects for gressing steadily, and on the while in a satisfactory manner, and our prospects for gressing steadily, and on the while in a satisfactory manner, and our prospects for gressing steadily, and on the while in a satisfactory manner, and our prospects for gressing steadily, and on the while the south to while the south of the shaft to a shaft in about a fortnight from this date, 4ft. 6 in. the contribution of the shaft to a shaft in about a fortnight from this date, 4ft. 6 in. the shaft to the dressing floors; a day or two waiter have very much impeded the surface work, caused some slight damage to waiter have very much impeded the surface work, caused some slight damage to waiter have very much impeded the surface work, caused some slight damage to waiter have very much impeded the surface work, caused some slight damage to waiter have very much impeded the surface work, caused some slight damage to waiter have very much undergound and waste to the shaft, which we shall comme

unerground driving to cut the Harehope lode. The cooper will deliver the new dolly-tubs driving to cut the Harehope lode. The cooper will deliver the new dolly-tubs next week.

TALYDNT.—T. Glanville, March 29: Old Lode: I have suspended the driving ratio of the north part of the cross-cut to the south part, which I believe to be the west on the north part of the cross-cut in the right side of the lode to drive on, and more productive of lead.—New Lode: In the right side of the deep adit the lode is of much the same value as for some time past, rise above the deep adit the lode is of much the same value as for some time past, rise above the deep adit the lode is of much the same value as for some time past, rise with the new shaft in about a week from this date. In the north cross cut we have intersected a lote? It, in width; its composition is a mixture of fluor spar have intersected a lote? It, in width; its composition is a mixture of and lead ore. We shall at once open a level to ascertain its chracter and value. I am pleased to say we have again our machinery and dressing department in full working order.

and lead ore. We have again our machinery and dressing department in full am placet to say we have again our machinery and dressing department in full working order.

TANEVILLE—A. Waters, March 30: In the 167 fm. level, west of winze, TANEVILLE—A. Waters, March 30: In the 167 fm. level, west of winze, and the state of waters of waters approach to a cavity. The rich-looking spar and the fat solid ore now our near approach to a cavity. The rich-looking spar and the fat solid ore now one in the state of the said level, as and it is very clear that we shall in sight before proximity to the great bunch, and it is very clear that we shall in sight before the said level, east and west of shaft, and east and The five short in the aggregate 375. No 1 stope, in back of the 142 west of winze, are worth in the aggregate 375. No 1 stope, in back of the 145, per vest, is worth 36. per fathom. No.—stope, west of ditto, is worth 45. per fathom. The stope in back of the 130 west, on south lode, to get into the We have lead up the above named stope. The stope in back of the 100 west, on and fole, is worth 35. per fathom. The stope in the 4 west is worth 35. per fathom. No. west of shaft on said south lode, is worth 15. per fathom. The stope in the 74 west is worth 15. per fathom. No other change to notice in the mine this week.

TREBERGH CONSOLS.—J. Gifford, March 27: Saturday last being our setting-the stope in the stope in the 16 of the 16 of the constance of the stope in the st

TREBEIGH CONSOLS.—J. Gifford, March 27: Saturday last being our setting—TREBEIGH CONSOLS.—J. Gifford, March 27: Saturday last being our setting—day, the following bargains were set. Ward's engine-shaft to sink an i make good day, the following bargain and the stone from Wheal Idat to the above men, stent 1 fm., at 81. 108. To draw all the stone from Wheal Idat to the above mine for building engine and boiler houses and stack at 1s. 6d. per perch, and sand at 1s. per perch. TREBEIGH CONSOLS (Silver-Lead).—John Gifford, March 30: Ward's engine-shaft is down 7 fm. 6 ft.; the ground is a little harder, but still requires timber. The engineer was here on Saturday, and ordered a 2-ft. stope to be taken out all over where we first thought would be a good foundation for the engine-house; this we hope to emplete in the beginning of next week, when we shall immediately

we hope to complete in the beginning of next week, when we shall immediately commence building.

TRELEIGH WOOD.—Edwin Hoskin, William Goldsworthy, March 29: The ground in the 56 being spare for driving there is no change to notice since our last advice. The lode in the 44, cast of the cross course, is still producing a little copper ore, worth 12, per faithout for tin. We have set three pitches to tweive men, at an average tribute of 12s. in 1t.

YAUGHAN.—March 25: In the deep adit level east the part of lode being extended is chiefly composed of a light clay-slate, carbonate of lime, and a small mixture of lead ore, not looking so well at present, in consequence of having met with across joint; but as we advance from its influence we hope to have a further improvement.

instare of head ore, not looking so well at present, in consequence of having met with across joint; but as we advance from its influence we hope to have a further improvement.

WEST CHIVERTON.—R. Southey, W. Roberts, J. Moyle, March 29: Setting Report: Last Staturday being our usual four weekly setting, the following bargins were set:—Hawke's Engine-Shaft: The 140 to drive west of this shaft, by six men, the month, at 10. per fathom. The 140 to drive west of this shaft, by four men, the month, at 110. per fathom. The 130 to drive west of shaft, on north lode, by four men, at 11. 10s. per fathom. A winze to sink below the 130 east of shaft, on south part of south lode, by four men, the month, at 41. per fathom, and 91. per ton for lead. The 20 to drive west of shaft, on north lode, by four men, the month, at 71. per fathom. The 60, to clear west of Hawke's shaft, by two men, 5 fms, at 11. 0s. per fathom.—Batter's Engine-Shaft: This shaft is now 3 fms. below the 150, and we have set it to be completed to the 160, or 8 fms. certain, to six men and three boys, at 401. per fathom and if finished within six months to be paid a premium of 51. The 150 to drive west of this haft, by six men, 20 fms. certain, at 81, per fathom. The 150 to drive west of this haft, by four men, the month, at 71. Ds. per fathom. The 140 to drive west of shaft, on south lode, by four men, the month, at 82. per fathom. A winze to sink below the 130, west of Batter's shaft, on north lode, by six men, to be communicated to the 140, at 82. per fathom.—Blub's Shaft: The 130 cross. cut to drive south of this shaft, by two men, the month, at 72. Per fathom. A winze to sink below the 130, seat of this shaft, on the north lode, by six men, to be communicated to the 140, at 82. per fathom.—Blub's Shaft: The 130 cross cut to drive south of this shaft, by two men, the month, at 61. Ds. per fathom.

A winze to sink below the 130, east of this shaft, on the north lode, by six men, to be communicated to the 140, at 82. per fathom.—Blub's Shaft: The 130 cr

re in the the cutto

WEST CRAVEN MOOL.—Telegram: Patchey Bridge, March 25: Another lode cut, cross cutting south in east shaft, worth 1 ton per fathom of lead ore. Further particulars by post.

D. Williams, March 25: I am pleased to inform you that we have just cut a ceoud tode in cross cut south, from the 2J fm. level in New East shaft, and is, so far, richer thin anything we have hitterto seen in this shaft, chiefly comprised of far, richer than anything we have hitterto seen in this shaft, chiefly comprised of gassu and limespar, currying a leader of almost pure galean from 6 to 9 in. wide, and is within a fathom of the other lode. In advance of this cross cut we have lost well-known lodes, two of which we shall cut in about 1e fms. driving. The lode in the forebreast of the 20 west has further improved, and is beta cen 2 and 3ft. wise, worth fully 1 ton of lead ore per fathom. I have commenced driving a 10 fm, level west upon same lode, which is 3it, wide, composed of timespar, along head of the surface, and we are driving a new level west upon the lode, which is fally 4it wide, and worth 24 cwts. of lead ore per fathom. He Blackhill level the ground is still very favourable, and good progress is being made; we are now within to fins. of the second cross vein, east of which are Ashworth workings, and we have every reason to expect we shall find the lode equally productive at this depth a ship with the very large that the lost is dry. The cross cut isouth to the three parallel lodes is driven with a full pare of men, and a great quantity of water is coming out of the forebreast, which provides that there is a strong lode in front. We are still getting good stones of ore out of the trench on surface. The bed for the winding-engine is nearly short time. Both metal pitches are looking well.

WEST ESGAIR LLE, "Join Davis, March 30: Western Mine: The tribute pitch at the lo cast is turning out very well, and we shall sample another parcel of 5 tons to-morrow. At the cross-cut west, at the same level, we have a five report we have mid

each, but there is still more lode standing on the footwill side. The 24 fm. level each has also improved, and is yielding more ore than usual, and I am strongly of opinion that it will become reditably productive a little deeper down. There is no ling else now in any other part of the mine. The stope in the back of the 12 and the rise above the adit levels are both yielding good ore. We have a large heap of leads the rady for the crossing mill, and the dressing machinery is nearly completed, but for want of two or three small connecting pieces we have not yet been able to set it in motion. I am promised everything from the foundry in a west from 1 needsy next, and in a very few days afterwards all well be in full operation. I much regret the delay that has taken place, but on account of the men being out at the foundry it has been unavoidable.

\*\*WEST MARIMA AND FORTESULTE CONSOLS.\*\*—William Blewis, March 23.\*\*

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\*\*WEST MARIMA AND FORTESULTE CONSOLS.\*\*—William Blewis, March 25.\*\*

\*\*WEST MARIMA AND FORTESULTE CONSOLS.\*\*—William Blewis, haven done, being out at the foundry it has been unavoidable.\*\*

\*\*WEST MARIMA AND FORTESULTE CONSOLS.\*\*—William Blewis, March 25.\*\*

\*\*WEST MARIMA AND FORTESULTE CONSOLS.\*\*—William Blewis, March 26.\*\*

\*\*Let The lode in the 17 let west is much serious the red with the pict of the pict, and give good ventilation to the levels.\*\*—North 16 let in the 7 let west is much improved, now worth 15, per fathom. The good led in the 71 let west is much improved, now worth 15, per fathom. The good led in the 71 let west is much improved, now worth 15, per fathom. The good led in 16.\*\*

THE MINING JOURNAL.

| Second shall from surface upon more of North Bales and and water lotter; this shart, of such as the state of the state of such as the state of surface and the state of the state of the state of surface and the state of the state of

the water; the men are now employed rising in the back of the 110 towards the winze referred to.

WILLOUGHBY.—H. Nottingham, March 29: New Lode: Pyne's shaft is in fair course of sinking below the 23, and is down 6 fms. 3ft. below the 23; the lode is regular in size, and producing some nice mixture stuff, lead and blende. The 23 end, driving south, is without change since my last, worth ½ ton of lead per fathom. The rise in back of this level is communicated with the stopes above, and a stope starting by two men in top of this rise going south, is worth ½ ton of lead and the same of blende per fathom; there is a better lode than this nearer the level.—Goddard's Lode: The 23 end, driving south, is yielding I ton of lead and the same of blende per fathom; this level has passed through 10 fms. of ore ground since we pussed under No. 1 shaft, and the back is whole from this to the 13, so that I calculate on having a good quantity of ore from this piece of ground, and look forward to the opening up of a similar piece of ground south of the No. 3 shaft, for which we shall continue driving the level. The two stopes working below the 13, south of No. 1 shaft, are worth ½ ton of lead and the same of blende per fathom. At the No. 3 winze we are now cutting in a fresh stope south from the winze, which is worth 15 con 6 lead per fathom. The stope in back of the 18, south of No. 4 shaft, is worth 15 cwts. of lead per fathom. The stope in back of the 18, south of No. 4 shaft, rejudiding ore in paying quantiles, but not rich. We have to day weighted off the 30 tons of lead sold on the 25th instant. Surface work progressing satisfactorily. WYE VALLEY.—10 lon Kitto, March 24: Monthly Report: I regret that I am unable at present to report to you more fully on the new discovery in the adit level exer, efferred to in my last, but we have been cross-cutting north through the foce ever since, and have not reached the footwall side; but the water is still issuing freely, and the l-de is looking most kindly. We have fired a few shots

The Mining Market has again been quiet, and generally speaking there is but little change to notice. All the metal markets are dull, and prices for the most part drooping, so there are few influences at work to cause animation. In shares speculators are closing their accounts in anticipation of Easter, whilst investors are waiting for a more active state of affairs, for it is a singular but well-known fact that the latter as a body seldom take advantage of very low

fact that the latter as a body seldom take advantage of very low markets, but generally prefer activity and higher prices before operating, forgetting that it is by buying when shares are depressed that the greatest profits are most frequently made. In all probability there will be a brisk revival of business soon after the holidays, and looking at the general fall we have lately had in prices, the present should be a very favourable time for purchases in lead share especially. The Tin Market shows no change whatever. The Banca sale has come and gone, and although a large quantity of tin was withdrawn—only 7300 slabs having been sold—the expected reaction has not yet taken place. Copper is weak, but there are some symptoms of recovery apparent.

In Lead Shares, East Van have been pressed for sale, and close at 10 to 10½, with a very weak market. Other shares have not moved much either way. Van Consols are 2 to 2½; Van, 39½ to 40½; Pennerley, 1½ to 2½; Glyn, 2½ to 2½; West Assisteon, 1½ to 1½; Tankerville, 11 to 12; Roman Grarels, 13½ to 14.

Some enquiry has existed for Great Dylliffe shares at 4½ to 6½ (4. paid). This company was lately known as the Dyllife, working the well-known mines of that name in Montgomeryshire. These have yielded very large profits, and have been sunk to a depth of about 120 fms. The last sale for the four weeks' working is 100 tons of lead, upon which the profit is quite 500%. About three years not the mines were thoroughly inspected and reported upon by Captain Waters, of Tankerville, who formed a very favourable opinion of their value for future productiveness. They consist of three distinct properties—the Dylliffe, the Esquirgaled, and the Llechweddu; and in all there is evidence of extensive works having been carried on in ancient times along the backs of the veins and at shallow depths;

The the last six months 40,000, worth of one has been sold, and 13,00. divided of lbs. per share will be paid next month.

THE WEEK.

SATURDAY.—The volume of fresh business was small, but the tone was good. Paris buying again supported Egyptians, which finally closed 80½, a rise of about \$2\$ per cent. on the day; large sailes, however, were made of Spanish, which fell at \$2\$ per cent. on the day; large sailes, however, were made of Spanish, which fell at \$4\$ will soon be necessary at Madrid to count up the cost of the late war, and when this is done it is difficult to see moth surplus for the bondholders. Turk Fives, 17 to 13½; French Fives, 100½ [60; Italian, 1861, 705, 705]; Mungarian, 1876, 534, 50½; Morris and Common and the state of the cost of the late war, and when this stone it is difficult to see month surplus for the bondholders. Turk Fives, 17 to 13½; French Fives, 100½ [60; Italian, 1861, 705, 705]; Mungarian, 1876, 534, 50½; Morris and Market and the state of the cost of the late war, and when this stone is a simple state of the state of the cost of the late war, and when this state is a state of the state of the cost of the late war, and when this state is a state of the late war, and when this state is a state of the state of the cost of the late war, and when the late of the late war, and the late of the late of the late war, and the late of the late of the late war, and the late of the late of the late war, and the late of the late war, and the late

CORNISH PUMPING ENGINES.—The number of pumping-engines reported for February is 17. They have consumed 1657 tons of coal, and lifted 12.900,000 tons of water 10 fms. high. The average dyf the whole is, therefore, 52,700,000 lbs., lifted 1 ft. high, by the consumption of 112 lbs. of coal. The following engines have exceeded

Crenver and W	heal Abrah	am-Sturt's 90 inMillions	
Ditto	ditto	-Pelly's 80 in	52-7
Ditto	ditto	-Willyams's 70 in	
Dolcoath - 85 in			52.7
West Basset G	renville's 7	0 in	53-1
Ditto -T	homas's 60	in	58.8
West Tolgus-I	Richard's 70	in,	534
West Wheal Se	ton-Harve	y's 85 in	62.6

SHAPING METALS.—A rotating cutter or other instrument for operating on metals and other materials is, according to the invention of Mr. G. W. Beynon, of Salisbury-street, Strand, secured upon a central shaft or spindle, or upon a revolving tube, socket, or sleeve, together with a small driven pulley also keyed or fitted upon the same shaft or sleeve, and at a suitable distance therefrom. Both the pulley and cutter are contained within the length or distance apart of two handles, by which the operator performs the work to be done, varying the pressure and change in the position of the instrument upon the work to be operated upon by employing an elastic driving band, and therewith rotating the instrument at a suitably high velocity. Either one or both of the ends of the shatt which revolve within the handles or within the socket pieces of the handles, may have a square or round hole therein to form a socket for dealing suitable. SHAPING METALS .- A rotating cutter or other instrument for at a suitably high velocity. Either one or both of the ends of the shaft which revolve within the handles or within the socket pieces of the handles, may have a square or round hole therein to form a socket for drilling, cutting, and polishing instruments, which may be fitted thereint on all project therefrom. The rolating catter, saw, or other instrument fixed between the handles, whicher upon the revolving shaft or upon the revolving tube or socket, may be either of cylindrical or other shape, having cutting teell or grooves arranged longitudinally or spirally around its periphery, and also at one or both ends thereof; and saws and such like instruments may be substituted for cutters and other instruments, and which may either be of cylindrical or other suitable form according to the work to be done, and such instruments can be speedily removed and others substituted.

IMPROVEMENTS IN FURNACES.—The invention of Mr. C. Bullowits, of Bochum, relates to gas furnaces to be employed for metallurgical and other purposes, and consists more particularly in the application to such furnaces of a peculiar combustion chamber, into which currents of air and gas are introduced, and where they are mixed together so as to cause a combustion, which commences at the point where the gases are intermixed, and gradually increases towards the outlet into the working chamber of the furnace.

towards the outlet into the working chamber of the furnice.

HOLLOWAY'S OINTMENT AND PILLS.—A great and 'precious property possessed by Holloway's inestimable remedies is that no skill or experience is required for their successful administration. No education or intelligence is necessary for using them to advantage beyond the capacity of understanding the plain and intelligible instructions accompanying each box and pot. For the cure of all internal or external ailments, Prof. Holloway has considerately placed such printed rules round his remedies, that error is impossible after they have been once read with attention. In these pills there is nothing nauseous to the taste or trying to the most tender age or delicate constitution; they purify, regulate, and strengthen the entire system.

With this week's Journal a SUPPLEMENTAL SHEET is given With this week's Journal a SUPPLEMENTAL SHEET is given, which contains: Original Correspondence: The Sutor Tunnel; the Richest Mine in the World; Mineral Wealth of Arizona; the Maxwell Land Grant and Railway Company (F. M. F. Cazin); Rossa Grande Gold Mining Company; Mining in Queensland; Gold Mining as it is (O. J. Harvey); the Central Swedish Iron Company; Linares, Fortuna, and Alamillos Mines: Economic Steam and Coal Stoke Holes (P. H. Hare); Sunnyside Mines, Weardale (G. Henwood): the Lead Mines of Derbyshire: Prospects of Cornish Mining (C. Bawden); Bronfloyd Mine, and its Management; British Mining v. British Undermining (T. Vosper); Gold in Wales, No. XXIV. (T. A. Readwin); Penneley Mine: the Iron Industries of Gloucester (R. Meade). The Late Edward Geach—In re the Native Iron Ore Company—Patent Matters—Meetings of the Economic Life Assurance, South Tolcarne, Great Wh. al Vor, Medlyn Moor, Lovell, Brookwood, St. Aubyn, West Godolphin, Canadian Copper and Sulphur, and Cathedral Companies, &c.

## The Mining Market: Brices of Metals, Ores, &c.

METAL !	MARKET-LONDON, MARCH 31, 1876.
IRON. £ s. d. £ s. d	TIN. £ s. d. £ s. d
Pig, GMB, f.o.b., Clyde 2 18 71/2-2 18 9	English, ingot, f.o.b 77 0 0- 78 0 0
Scotch, all No. 1 3 2 0 - 3 15 0	, bars , 79 0 0
Bars, Welsh, f.o.b, Wales 6 5 0- 6 10 0	refined 80 0 0
in London, 7 0 n- 7 5 0	Australian 73 0 0
" Stafford., " 8 15 0-10 5 0 " in Tyne or Tees 7 0 0-	Banca 85 0 0- nom.
in Type or Tees 7 0 0	Straits 72 10 0- 73 0 0
Swedish, London 14 19 0-15 0 0	COPPER.
Rails, Welsh, at works 5 15 0- 6 0 0	Tough cake and ingot. 84 0 0
Railway chairs	Best selected 85 0 0 - 86 0 0
, spikes	Sheets and sheathing . 89 0 0
Sheets, Staff., in London 11 0 0-12 0 0	F at Bottoms 90 0 0- 91 0 0
Plates, Staff., in London10 15 0-12 10 0	Wallaroo 84 0 0- 84 10 0
Hoops, Staff 9 10 0-10 0 0	Burra, or P.C.C 84 0 0- nom.
Nail rods, Staff. in Lon. 8 5 0- 8 15 0	Other brands 83 0 0- 84 0 0
STEEL.	Chili bars, g.o.b 77 0 0- 77 1 0
English, spring 16 0 0-25 0 0	PHOSPHOR BRONZE.
,, cast	Bearing metal
Swedish, keg18 10 0	No. VII. alloy 145 0 0
fag. ham21 0 0	
LEAD,	BRASS.
English, pig, common . 21 10 0-21 15 0	Wire 9¼d
L.B21 15 0	Tubes 9 -12d.
W.B24 0 0	Sheets 9 -10
sheet and bar 23 0 0	Yel. met. sheath. & sheets. 734 - 8
nine 24 10 0	Nails composition 91/2 -101/2
red24 0 0-24 10 0	
white28 0 0-29 10 0	TIN-PLATES.* per box.
n tent shot26 10 0	Charcoal, 1st quality 1 7 0- 1 8 0
Spanish21 2 6-21 5 0	,, 2nd quality 1 5 6- 1 6 0
QUICKSILVER.	Coke, 1st quality 1 2 0
Flasks of 75 lbs., ware. 10 0 0	,, 2nd quality 1 1 0
	Blackper ton 17 0 0- 17 10 0
SPELTER.	Canada, Staff. or Gla., 15 0 0 - 15 10 0
Bilesian or Rhenish 23 10 0- 24 0 0	at Liverpool
English, Swansea 23 10 0- 23 15 0 Sheet zinc 28 0 0- 28 10 0	14 × 10 = -
	c less for ordinary; 10s. per ton less for

Canada: IX 6s, per box more than IC quoted above, and add 6s, for each X. Terne-plates 2s, per box below tin-plates of similar brands.

REMARKS.—No new feature has presented itself which calls for special comment. The markets generally are quiet all round. Sales are, as a rule, not pressed, but buyers do not come forward to an ex-REMARKS.—No new feature has presented itself which calls for special comment. The markets generally are quiet all round. Sales are, as a rule, not pressed, but buyers do not come forward to an extent to afford such support as to inaugurate a period of activity. Nor can this be so until the conditions of trade undergo a very important change. A measure of consolation as to the dreary position into which some metals have fallen may be gathered from the tone of the reports which appear in the papers regarding almost every branch of commerce. Almost all trade throughout the country is very quiet, so that metals are not an exception, but only another example of the rule. Surely it is fair to argue that when other trades revive, and the general stagnation is displaced by the normal activity which is at once the pride and characteristic of this commercial country, so important staple as the metal trade is sure to share in the general prosperity. It is granted that there are considerations in connection with the metal trade which then to intend that there are considerations in connection with the metal trade which then to intend the thoral reverse of the private of the community at large, the time may come—and we believe will come—when even these evils will have rectified themselves, and once more the tide of prosperity will turn. It is, of course, very discouraging to enter upon an other quarter of the year—and that the usually busy quarter—with no report more encouraging as to the present state and future prospects than that presented to our readers; but the condition of affairs as they are must be accepted, and still further patience must be exercised. The favourable change in the weather will be helpful to the shipping interests, which for some weeks past have been seriously interfered with in consequence of the prevalence of high wind and stormy seas. Makers are very generally doing all they cun to reduce their make as much as possible, to accommodate itself to the very limited demand; but, in spite of every effor

al in like manner is neglected.

The history of the Iron Trade for the first quarter of 1876 will stand out in unenviable notoriety, as, perhaps without exception, the dullest and most unprofitable of all the quarters of all the years since the iron trade of the country boasted a history at all. The most unsatisfactory feature of the case seems to be that all the years since the iron trade of the country boasted a history at all. The most unsatisfactory feature of the case seems to be that the prospect of the future is not one whit more hopeful than the experience of the past. Look in what direction you may, there is no lifting of the cloud of deadly duiness which overhangs every branch of the trade. Expected coders from foreign ports, which have hitherto formed the chief outlet for our surplus stocks, do not come forward. It is of little use to wire to correspondents that the second quarter of the year has arrived when lee is not expected to form any longer an insurmountable barrier to the free interchange of commercial relations with the civilised world. Ice may melt, and sailing and steam vessels may ply their calling north, south, east, and west; but, judging from appearances, brokers will have to secure "dead weight" in a form other than iron bars, plates, sheets, or pigs—for these commodities seem to have failed into desurdue in foreign parts just now, or, at all events, the United Kingdom is not called upon to supply the requirements of the rest of the world. But should the happy suggestion be thrown out that perhaps the home trade is sufficiently active to afford some satisfactory measure of support to the trade, it would not be an easy task to point to the centres of support to the trade, it would not be much difficulty in showing that the various centres of supply were lamentably deficient of work, that large numbers of etablishments are barely employed half time, and these are among those exceptionally favourably circumstanced, while there are many where the men are not working nearly up to half time, and there are some—and it is to be feared that the number is on the increase—which are closed altogether until such time as shall witness the dawn of a brighter future than is promised under existing circumstances. The supply of iron is still too abundant for the very limited demand; and not wifficient to diminish stocks.

From the North of England the r

is d.ing that unless a tresh supply of orders comes forward, or which there stand no prospect, some of the finished ironworks in this district must perforce stand idle, for it is highly improbable that any ironmaster could be found so infatuated as to make for stoke just now. No. 3 pig iron is obtainable at 48%, and No. 4 forge, 47%; rails, 74, 7%, 64, to 74, 16%, according to section. Merchant bars, plates for shipbuiling. Puddled bars 44, 12%, 64, to 44, 15%.

Turning to South Wales, the prospect is not more cheering. Intense dulness is still the characteristic. The Tondu Works, which have been rather exceptionally favourably circumstanced, find trade so bad that their men are to work only four days per week, while at many other works much shorter time than this is the order of the day. The railway bar iron mills fall to secure orders, for what railway bars are needed are ordered from the steelworks in preference to iron rails, and the trade in all other descriptions of finished iron may be said to be equally dull. The export return for February shows that from Cardiff were cleared 1544 tons; from Newport, 6163 tons; and from Swansea, 459 tons, in all 14,168 tons.

The market for pig iron at Glasgow opened at the beginning of the week quiet but firm—buyers offering 58%, 10½4, sellers asking 59%. On Tuesday business was done up to 59%, 3½d, the market closing in the afternoon not quite so firm. On Wednesday business was reported from 59%, 1½d, to 59%, 3d.; to-day, 59%, 9d to 59%, 10½4.

22. 1072.	***************************************	
Week ending Week ending	March 27, 1875	Tons 10,325
Tot	al decrease for 1876	23.631

LEAD.—The market has been quiet but firm. Soft Spanish, with-out silver, has realised 214, 2s, 6d., and a parcel of 200 tons sold for 1\frac{3}{5}, buyers; the agent's report shows that the various points in

arrival near at hand at 211.5s. Good soft English pig is quoted at

211. 10s. to 211. 15s.

QUICKSILVER.—Business has been done throughout the week at 101., which is the last quotation.

101, which is the last quotation.

TIN.—There has been greater activity in the tin market than of late. It opened firm at the beginning of the week, and business was concluded in Straits at 731, at which price Australian was likewise quoted. As the week advanced the domand for Straits improved, and sales were reported 731. los. to 741. Business was also done in Australian at 732. On Tuesday the Dutch sale of Banca took place, at which 24,800 slabs were put up to auction, and 7300 sold, realising an average price of 50 8.—the equivalent being about 834. in London. Subsequent to the Dutch sale business has been somewhat contracted, and former quotations scarcely maintained.

TIN-PLATES.—There is no change in this market. The demand for tin-plates continues as sluggish as ever, and the prices obtainable are such as to leave no margin for profit. Market closes weak to-day—Straits, 724. los. to 734.

to-day-Straits, 72l. 10s. to 73l.

THE IRON TRADE — (Griffiths's Weekly Report). — Friday Evening The price of g.m.b. warrants has remained steady during the week, and closes this afternoon in Glasgow with buyers at 59s. 9d., an advance on the week of about 9d. per ton. Makers' iron has been reduced this week. We quote No. 1 as follows:—Garsherrie, 67s.; Coltnes, 69s.; Calder, 70s.; Langlon, 67s.; Summerlee, 69s.; Monkland, 59s. 6d.; Glengarnock, 65s. 6d.; Eginton, 57s. 6d., fo.b. Ardrossan; Shoots, 68s., fo.b. Leiti; Kenniel, 61s., fo.b. Bo'ness. The pre-occupations of the ironmasters incident to the annual meeting of the Iron and Steel Institute, held in London this week, have absorbed the attention of the principal members of the iron trade. The discussions have been able, and of a practical and useful character; the stirtings well attended. The iron trade continues quiet, and the orders generally given out since we last wrote are in small quantities only. We have no business to report in iron rails; on the other hand, there are numerous enquiries for steel rails, and a large business has be n done during the last three weeks in Bessenier steel rails. One contract for 10,000 tons was taken by the Phenix, at Sheffield; a contract for 45,000 tons by a Welsh firm for Russia, and another for a large lot was secured by Bolckow and Vaughan. Two other contracts for steel rails have also been taken by another great firm of makers in Monmouth-shire. The prices vary. The largest lot was sold at 9l. 10s., which included all charges for delivery into a foreign port. It is thought now that the time has arrived for a substantial reduction in wages, and it is not at all improbable that the workmen are as much alive to the necessity of this step, and an increase in their hours of labour, as the masters themselves. Important atcps will be taken in this direction before Quarter-day, which takes place at Birmingham next Thursday week. The tin-plate trade continues quiet and inaniante, with prices unremunerative. THE IRON TRADE - (Griffithe's Weekly Report). - Friday Evening

Thursday week. The tin-plate trade continues quiet and inanimate, with prices unremunerative.

Messrs. Viviax, Younger, and Bond.—Copper: On Tuesday last, at public auction, about 2000 tons Wallaroo copper sold at an average of 8.8.1 Ds. for cakes, and 84.1 Ils. 9d. for ingots. The average price of Wallaroo for the past 12 months has been about 9.0.1 per ton above Chili bars. This warrants to some extent the opinion that either Wallaroo should advance, and thus rectify this relative difference (being now only 9.6. above Chili bars), or that other descriptions should decline, seeing that the trade participated largely in the buying, owing to the relatively favourable price. As the whole quantity was sold the importer undertakes not to offer any more by private contractor at auction until June 27, when a further quantity (to be declared on June 6, but not exceeding 20 otons) will be offered. Chili bars have since been sold at 7.1., cash, and 76.10s., wht2 months prompt, other descriptions of foreign and English manufactured being for the present rather nominal.—
Try: The market is about 20s. per ton dearer than a week ago, chiefly owing to the small arrivals of Australian this month, and the prospect of the Dutch Trading Company adhering to the limit of 50 guilders fixed at the previous sale in January last. On Thue-slay last this expectation was realised, as of the 24,800 slabs Blanca offered at auction, 7300 slabs sold at 50 guilders, and the remainder was withdrawn as before, in the absence of further demand at the price, equal to about 55.10s. delivered here. The market was steady here afterwards, though prices showed no further improvement. Straits sold up to 73s. 6d., and Australian at 63s. At the close the tendency is rather easier, and Straits are reported at 73s. 6d. forward decivery. The English smelters are asking an advance to 79s. for common ingot, which, however, is not obtainable.——Thy-PLATES rather steadier.

Messrs. Hexny Rogers, Soys, and Co.—Copper. The event of the moment has been the face of

which, however, is not obtainable. — TIN-PLATES rather steadier.

Mesers. Henry Rogers, Sons, and Co.—Copper: The event of the moment has been the sale by auction of 2000 tonsof Wallaroo copper, which took place last Tuesday, the average price of the cakes being 83/, 10s., and of the inacts 84/, 11s., 94. These prices the trade considered were a fair value, looking at the present surroundings of copper. Chili bars are maintained at 77/ to 78/. English in second hands is offered under smelter's prices, whilst the demand for manufactured and yellow metal has very much decreased, and cannot improve till prices advance in the Est or the exchange rises.—Tin: 24,000 slabs of Banca were offered on Tuesday in Holland, 7300 only finding buyers at the sale lmit 50 fts. Straits tin and Australian are both a trifle dearer than last week, but the demand is small.—Spelters: Foreign maintains its price, but considerable quantities of English are still offered from second hands without finding buyers. The best brands are, however, held off the market.—Lead is a trifle firmer, with more business doing.

Mesers, Fay, James, and Co.—Copper: The most noticeable event in the market.

were, held off the market. — LEAD is a trifle firmer, with more business doing.

Messrs. FRY, JAMES, and CO.—COPPER: The most noticeable event in the market for this metal has been the somewhat re-olutionary course taken by the importers of Wallaroo by their sale, on Tuesday, by public auction, of 2000 tons of their copper. The notice of this sale had been before the trade for upwards of a month, and the effect had been to cause great stagnation in fine copper generally, but especially in other Australian brands. At the sale the whole quantity found ready buyers at an average of 83%. 10s. per ton for cake, but a special condition in buyers' favour reduces the price to about 83%, per ton. The result must be very unsatisfactory to the importers, seeing that immediately before the announcement of the sale (Feb. 25) the value of this copper in the market was 87%. 10s. per ton, ordinary terms, and seeing also that Chilian (the barometer of the market) has maintained its value unchanged, it is manifest that the low average obtained for the Wallaroo is due to the course taken. To day Chili copper, as well as furnace material, is very firm at quotations, the latter practically off the market at 15s. 64, to 16s. 64, per unit for orea and regulus. English is steady. —Tix has held a steady course and a mode-rate business doing from day to day. For English the market is firmer, partly from improved demand and partly from the miners holding back their ores.

Messer, Sanpford and Bird—Copper: Chili bars show little change. The re-

improved demand and party from the miners holding back their ores.

Messrs. Sandford and Bird—Copper: Chili bars show little change. The result of the Wallaroo ale appears to have given satisfaction, and the market close this evening with more disposition to do business both in foreign and manufactured descriptions.——Its: This market has gained strength during the week, and the action of the Dutch Trading Company in withdrawing two-thirds of their tin from the market may be expected to still further improve prices. There is but little business passing at the moment, however, and quotations may be considered nominal.—Leab keeps fairly steady, and as the spring advances we may look for a moderate improvement.

M. Muray T. Tys. Foreign salation is trained.

moderate in provement.

Mr. Murrant.—Tin: Foreign maintains its price at present, the deliveries from London stock for this month being good, the arrivals moderate, and shipments from the Straits and Australia comparatively small, and if these favourable conditions continued for a few months no doubt higher rates would be the result. It is easy for holders to say "This is what you are continually telling us, and yet prices keep falling," but the continue I drop is the inevitable result of a supply of the article, which has been for some time, and stil is, greatly in excess of the demand. The little bu-iness done during the week has ranged from 72s. 64. to 74s. for Straits and Australian for spot and forward lots.—Copper. Chill is exactly the price which was quoted this time last week, and is wonderfully steady considering all the circumstances; this simply shows the perfect soundness of this trade. The public sale of Australian went off at a reasonable figure, and in a manner which cannot have failed to give the utmost satisfaction to all concerned. The next sale takes places on June 27, when about the same quantity (2000 tons) will be offered, practically without reserve.

The settlement of the fortnightly account took place in the MINING SHARE MARKET this week, and caused, as usual, a good many fluctuations in prices of speculative stocks. At the Banca sale of tin 24,800 slabs were offered for sale, and 7300 sold at an average of 50 fls., or about equal to 85l. in London.

The shares chiefiy dealt in since our last have been East Van. Roman Gravels, Great Laxey, Ladywell, Parys Mountain, Pennerley, Pateley Bridge, Wheal Crebor, Rookhope, Tankerville, West Tankerville, Van Consols, West Chiverton, Marke Valley, and a few others. Van, 39 to 41; the directors have declared a dividend of 16s. per share (12,000l.) for the quarter. East Vans have been as low during the week as 9½ to 10, and leave off 11 to 12. In the B crosscut, driving north, there are spots of lead, but not sufficient to value. The lode in the 25 cross cut A is worth 10l. per fathom.

Great Laxey, 17½ to 18½; the accounts to be presented to the half-yearly general meeting on A cril 12, have been issued. They show sales of lead ores from Aug. 6 to Feb. 4, 1200 tons, for 29,482l. 10s.; blende, 3302 tons, 10,800l. 1s. 4d.: total, 40,282l. 11s. 4d. Sundry sales, 217l. 4s. 10d.; balance of last meeting, 11,643l. 16s. 8d. The expenditure for labour cost was 16,406l. 11s. 1d.; merchants' bills, 16,406l. 11s. 11d.; royalty to the Crown, 4251l. 17s. 1d.; and other charges amounting in the whole to 11,282l. 10s. 2d. Two dividends were declared, one in October of 7500l., and one on Jan. 26 of 7500l. charges amounting in the whole to 11,282l. 10s. 2d. Two dividends were declared, one in October of 7500l., and one on Jan. 26 of 7500l., making 15,000l. for the half-year, and after transferring 1500l. to the reserve fund there is a balance of 7954l. 10s. 6d. The reserve fund now consists of 5543l. 1s. 4d. The assets include the above balance of 7954l. 10s. 6d., and stock of ore on hand valued at the sum of 14,611l. 7s. 6d. During the last four months the returns have fallen off owing to the decreased value of expend of the heat

sum of 14,611.7 7s. 6d. During the last four months the returns have fallen off, owing to the decreased value of several of the best stopes, but the agents hope to resume their former rate of returns in about a month. The reserves of ore have not been diminished. North Laxey, 1 to 14. Roman Gravels, 13½ to 14; no particular change here. Tankerville, 11 to 11½; the 167, driving east, is worth 30L per fathom. The stopes in back of this level are worth in the aggregate 375L per fathom. South Roman Gravels, 25s. to 30s.; Ladywell, 1½ to 2½; Penstruthal, 7s. to 9s.; Pennerley, 2 to 2½; Plynlimmon, ½ to ½; Pateley Bridge, 5¼ to 5½; West Chiverton, 19 to 20; West Craven Moor, 11 to 12; West Pateley Bridge, 5½ to 5½; West Tankerville, 2 to 2½; Glyn, 2½ to 2½. Pennant, 5 to 5½; Van West Tankerville, 2 to  $2\frac{1}{2}$ ; Glyn,  $2\frac{1}{2}$  to  $2\frac{1}{2}$ ; Pennant, 5 to  $5\frac{1}{2}$ ; Van Consols, 2 to  $2\frac{1}{4}$ . West Assheton,  $1\frac{3}{4}$  to 2; and not so firm. Rookhope (Lead) have been largely dealt in, and leave off  $1\frac{1}{4}$  to

operation above the 25 are worth in the aggregate about 6 ton of lead ore per fathom. In the back of the 25 there is one stope valued at 2 tons of lead per fathom. Below this point there is a wing worth 6 to 8 tons per fathom, but which cannot be worthed to 8 tons per fathom, but which cannot be worthed the 42 is driven up to unwater it. Mr. Blenkiron is of opinion that the ore obtained from these shallow levels will be more than segment to pay costs until the 42 is driven up and more profilable ground laid open.

Old Treburgett. 7s. to 9s. the recounts to be

general meeting have been published. The sales of lead ore credited realised 10,967. Its. 6d.; iron ore, 527. 14s.; total sales, 11,021, exclusive of ores taken for royalty. The cost at the mine to 10,967. Its. 6d.; iron ore, 527. 14s.; total sales, 11,021, exclusive of ores taken for royalty. The cost at the mine 10,9011. 18s. 6d.; royalty and other charges, 9581. 7s. 6d.; Londones, penses, 4391, 0s. 9d., the whole showing a loss on the year's working of 10761. 7s. 7d. In the agents' report it is stated that the year's working of 10761. 7s. 7d. In the agents' report it is stated that the other trully raised in the year realised 12,4471. 10s. 9d., out of which the lords received 12441. and it is this question of dues, for some time in dispute, that has kept the mine from making a good profit in the year which was driven 46 fms. through a rich course of one low the 70, which was driven 46 fms. through a rich course of the low the 70, which was driven 46 fms. through a rich course of the low the person of the low the low the low the person of the low t in dispute, that has kept the mine from making a good profit, Be low the 70, which was driven 46 fms. through a rich course of on worth from 15t. to 60t. per fathom, a winze has been sunk 21 fm behind the end, and driven 6½ fms. on a splendid course of on worth 75t. and 50t. per fathom, but this, until the royalty and obsequestions are settled, is suspended. There are also in this plan three stopes worth 50t. per fathom. Carn Brea, 29 to 31; 60t. Kitchen, 3 to 3½. Devon Great Consols, 4 to 4½; the valuation of the different points in operation here is 50½ tons of copper, or 10% per fathom.

Kitchen, 3 to 3½. Devon Great Consols, 4 to 4½; the valuation the different points in operation here is 50½ tons of copper, or 1% per fathom.

South Frances, 1½ to 2; the purser has issued a circular to the effect that the Great Flat lode has been intersected at the 185 falevel cross-cut, and although much has not yet been seen of it, the prospects are good. West Frances, 7 to 7½; the cross-cut here is thought to be nearing the Great Flat lode at the 130; small branches of tin and copper have been met with. Dolcoath, 35 to 37; Eust Caradon, 1¾ to 2; East Pool, 13 to 14; Marke Valley, 2½ to ½; Parys Mountain, 15x, to 17x, 6d.; South Carn Brea, 1¼ to 1½, & Aubyn United; at the meeting held here a call of 25x, per share wan made. The loss on four months' working was 821t, and the debit balance 902t. Two or three favourable points are in progress, my one of which may soon improve the prospects of the mine. South Caradon, 130 to 140; South Condurrow. 4 to 4½; Timoroft, 17½ to 1½; ½; Unity Wood, 1½ to 1½; West Seton, 3½ to 36; Wheal Agar, ½; 2½; Wheal Crebor, 2½ to 2½; Wheal Grenville, ½ to 1½; to 1½; West Seton, 3½ to 36; Wheal Agar, ½; 2½; Wheal Kitty (St. Agnes), 2 to 2½; Wheal Grenville, ½ to 1½; call paid, West Tolgus, \* 67½ to 70; the lode in the 135 west is ppening of well, and worth 7 tons of good copper ore per fathom. The sampling for the month is 360 tons. At Brookwood meeting her was a loss shown on four months' working of 215t, and a balance in hand of 13t. 11x, 4d. Wheal Peevor, 1½ to 2; West Baset, 50 5½. Dyliffe, now the Great Dyliffe Mining Company (Limited), 4 paid, 4½ to 5½; the month's sale of ore, 100 tons, realised over 18; per ton, and left a profit, we understand, of more than 400/. Argetine, 6¾ to 7½; Condes of Chili, 6¾ to 7½; Chontales, 7x, 61, 10 fee; Eberhardt and Aurora, 7¼ to 7½; Emma, 1½ to 1½; Sweetland Crei, 2 to 2½, ex. div.; Santa Barbara, 1½ to 1½.

The Market for Mine Shares on the Stock Exchange during the The Market for Mine Shares on the Scote Exchange during in week has been somewhat interfered with by the fortnightly settlement, which commenced on Tuesday. Since its completion pachases have been resumed, with a generally more active market. Van, Fast Van, Pateley Bridge, Great Laxey, North Laxey, Robhope, West Pateley Bridge, Assheton, and West Assheton have been

the mines mostly dealt in.

Van, 39½ to 40½; a rush of water from the lode has prevented the men from working in the 105 during the week. They will respect driving the level on Monday. There is no alteration in any pard the mine since the report published last week. The usual for weekly sale—500 tons of lead and 150 tons blende—takes places at the control of the directors declared a quarterly distance. the mine since the report published last week. The usual fags weekly sale—500 tons of lead and 150 tons blende—takes place but week. On Thursday last the directors declared a quarterly divided of 16s, per share, free of income tax (12,000L), payable on Apilla, This is at the rate of about 75 per cent, per annum upon the capial of the company. East Van have again fluctuated considerably, but close 11 to 12; in the official report the lode in the drivage toward Van is valued at 10L per fathom. The agent proposes to drive or side the lode, as it can be done with greater rapidity than in the lode itself. The lode will be cut through when opposite the shaft at which point a good deposit of ore is expected. Pateley Bridge, 5½ to 5½; there is no change at this mine. All points are as last reported, and matters progressing in a satisfactory manner. Wet Pateley Bridge, 5½ to 5½; the lode in No. 1 shaft is daily improving and at present worth 8L per fathom for lead. No. 2 shaft is just being re-opened. It is stated that in the bottom there is a solid in of lead ore 3 in. wide, left when the sinking was discontinued owing to the water. It is now drained by the deeper workings. Grogwinion, 5½ to 6½; the latest news from the mine reports an important improvement in the intermediate level. No. 4 lode, in the other levels, is still opening out in a masterly manner, and it yielding a large quantity of lead. The reserves of the mine areas being increased at a much faster rate than the sales of ore—that it to say, more than double the quantity sold each month is being discovered and laid oren for future working, thus ensuring the permanent success of the undertaking. The May sale of ore will be about 100 tons. Van Consols, 2 to 2½; the fine weather that has now set in will be of great advantage to the completion of the weather of the bargains as last reported.

Pennerley, 2 to 2½; the lode in the 120 east is worth 3 tons per fathom; it indicates very favourably, and is opening out well. The 130 has about 3 fms. to drive to come

The 130 has about 3 fms. to drive to come under this run of ore, as the end is showing very promising for improving. The 100 alone is also presenting good appearances, and yielding good store of lead; this level is considerably behind the 120. Potter's Pit shift will be down to the 90 by the end of this week. The excessive has at this point induces the belief that a large deposit of ore exist at the junction, just below this level. A full report will be found in another column. Wye Valley, 6½ to 7½; 40 tons of lead were sold on Thursday at 144. 19s. per ton. The recent discovery in the site east is steadily improving; it is now profitable ground for a wish of 6 ft., and the manager believes that it belongs to a big deposit lower down: in all probability this discovery will prove as rich of 6ft., and the manager believes that it belongs to a big deposite over down; in all probability this discovery will prove as rid as the one made some six months ago, about 100 fms. to the web ward. The 22 is getting near the ore ground, and may now cut if any day. Other parts of the mine looking well, and larger return of ore will be shortly made. Monthly report in another column West Wye Valley, 4 to 4½; the surface works are now being public forward rapidly. The manager advises, under yesterday's dist, that a good lode is now being worked in the 26, and all other points looking well.

West Assheton, 13 to 2; the lode has been partially cut, and the

West Assheton, 13 to 2; the lode has been partially cut, and the indications are considered to be encouraging. Lianidoses, § 16% the bottom level continues to open out well, and the level is beightiven with all possible dispatch, there being at presents good by in the end. The explorations on the north part of the lode in the continuous continuous continuous continuous continuous. in the end. The explorations on the north part of the lode north old workings are resulting satisfactorily, and the cross-cuts result started in this portion of the lode are already yielding a good quatity of lead. West Goginan, 2½ to 2½; this mine is going on well, and opening out in a most satisfactory manner.

Exchequer shares have been largely dealt in, and closs first 1½ to 1½; it will be seen by the statement appearing in another column that the lowest assay of the ore would give a net return of 103,000.

Der annum: the total cost of mixing and militar is estimated in the column of the colum

per annum; the total cost of mining and milling is estimated if the per ton. Each level is producing rich ore, and regular stopics has been commenced at the 300 ft. level. Regular and increasing shipments of bullion are expected for the with

has even commenced at the 500 It, level. Regular universities shipments of bullion are expected forthwith. I.X.I. in considerable demand, closing  $\frac{7}{8}$  to  $1\frac{1}{8}$ ; a document signal by allthe miners and residents at Silver Mountain, sworn before a notary public and attested by him, states that they have resided in

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<sup>\*</sup> West Tolgus was erronsously quoted 48 to 52 instead of 68 to 72 is less west ournal.

the immediate locality of the mine for some years, are well acquainted with the mine (many having worked in it), and that but for their firm faith and unshaken confidence in its ultimate success the mineral later level by the prince for the mineral factors. for their firm fath and unshaken connidence in its ultimate success they should have left Alpine County long ago; the miners further believe the mine is destined under the present management "to bring out the camp, and with it our interest therein, and that at no

they should have left Alpine County iong ago; the miners further they should have left Alpine County iong ago; the miners further they should have a company and with it our interest therein, and that at no bring out the camp, and with it our interest therein, and that at no distant date."

Condes of Chili, 6\frac{3}{2} to 7\frac{1}{2}; the detailed report of the special commission is due on Monday; the manager is expected to arrive at mission is due on Monday; the manager is expected to arrive at it is mission in due on Monday; the manager is expected to arrive at a rich course of ore has been met with in one of the side lode, reported to be of equal prospective value to the Isolina main lode.

Estebardt and Aurora, during the adjustment of the account, fell to \$\frac{1}{2}\$, to time the mines, the affairs are being managed by his brother, absence from the mines, the affairs are being managed by his brother, absence from the mines, the affairs are being managed by his brother, and the property of the method of the same circumstances are few men, if any who could have accomplished under the same circumstances are few men, if any who could have accomplished under the same circumstances are few men, if any who could have accomplished under the same circumstances are few men, if any who could have accomplished under the same circumstances are few men, if any who could have accomplished under the same circumstances are few men, if any who could have accomplished under the same circumstances are few men, if any who could have accomplished under the same circumstances are few men, if any who could have accomplished under the same circumstances are few men, if any who could have accomplished under the same circumstances are few men, if any who could have accomplished under the same circumstances are the same circumstances are the same circumstances are the same circumstances and circumstances are the same circumstances are the same circumstances are the same circumstances are the same circumstances. The first same circ

perion.

April 6, 1872, occurs the following copy of a telegram received in Ludon, April 6, 1872;

"Very great improvement since last report. On 7th floor drifted 120 ft., and on the 10th floor 49 ft., all in ore; at bottom winze, 70 ft. below old workings, drifted 40 ft., all in ore. Sample assays 28 per cent, lead and 32000 silver. Reserves discovered since last report over 8000 tons. Everything connected with the mine is solved to 15 ft. below old workings, drifted 40 ft., and in ore. Sample assays 28 per cent, lead and 32000 silver. Reserves discovered since last report over 8000 tons. Everything connected with the mine is shighly satisfactory—Mailed Supplementary Report: Canyon road still bad. Shall highly satisfactory—Mailed Supplementary Report: Canyon road still bad. Shall highly satisfactory—Mailed Supplementary Report: Canyon road still bad. Shall highly satisfactory—Mailed Supplementary Reports and Hussey. You will see that the first in this flag the report fully on return with the state in nothing in this despatch to justify the monatrous statement made in the garded extract from it that these 8000 tons of ore had an assay value of \$2000, or that the despatch above quoted gives to the reserves any specific value whatever. I also believe that you will find nothing in this telegram inconsistent with the more detailed statements of my letter of April 2, upon which of an any responsibility goes, it was based."

Flagstaff have advanced to 1\frac{1}{3}, 2\frac{1}{3}, upon further favourable reports from the mine, and purchases for influential holders.

Quartz Mines have been without material variation. St. John del Rey, 365 to 385; 18,000 oits, is the return for the second division of March (11 days); value, 6975L; yield, 9 oits, per ton. Argentine, 69 to 7\frac{1}{3}; the latest reports state that large quantities of ore have been raised ready for treatment. The artizans sent out from this country have arrived in good health at the mine. The working of the Piqué Mines, as well as the Captain and other se the Fique Mines, as well as the Captain and other sections (reported equally rich as Fiqué), are being prosecuted upon an extensive scale. As soon as the present 36 heads of stamps are in order, capable of requiring 1500 tons per month, it is proposed to extend the stamping power to 100 heads, for which there is ample engine power. Don Pedro, 7s. to 9s.; produce cleaned up, first division for March, 7(0 oits.; underlie of the lode is small and poor. Sinking has been

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The Market for Hydraulic Mine Shares on the Stock Exchange has been quiet during the week, business having been impeded to a crtain extent by the half-monthly settlement. The extremely stormy weather has hitherto prevented any of the companies from steadily washing, though the different agents one and all speak of the immense amount of frozen snow in the mountains as assuring the longest water season yet known. The rainfall in the neighbourhood of Datch Flat, California, up to March 7 had this year a nounted to above 53 in., against a total fall of 38½ in. during the year 1875. The season for this description of mining has this year commenced later; but this is all in favour of the mines, as more profitable use can be made of the water when the days are longer and warner. Blue Tent, 3½ to 4; Professor Price reports that all matters are progressing favourably, both with regard to the ditch and mine. The former has thus far been so blocked with snow that but little water has passed through it. When the snow melts, the supply will, however, be ample, and will extend far into the fall of The Market for Hydraulic Mine Shares on the Stock Exchange and mine. The former has thus far been so blocked with snow that but little water has passed through it. When the snow melts, the supply will, however, be ample, and will extend far into the fall of the year. The partial clean-up recorded in these columns recently, is not, Prof. Price says, any criterion of results when fairly at work. Sweetland Creek, 2 to 2½: Mr. McLean reports the position as unchanged: he is still washing on the side dirt, and expects to be able to make a clean up at the end of March. The new tunnel extension was was nearly blocked, ready for washing through. Shares are quiet, with a tendency to weakness. Birdseye Creek, ½ to 1½: a letter from Mr. Powers will be found in another column. He says the snow is 2 ft, deep at the mine, and still falling; such weather has not been known by the oldest settlers, and it has interfered with the washing considerably. He, however, feels confident of better returns as soon as the weather moderates sufficiently to allow of continuous washing. Shares have been quoted lower during the week, but close firm. Cedar Creek, ½ to ½: Col. Ludlum reports that he is doing what work he can in the various claims, but being done under such unfavourable circumstances, but little is accomplished in comparison with what could be done in midsummer with pose under such unlayourable circumstances, but little is accom-plished in comparison with what could be done in midsummer with the same quantity of water. The work of fitting up the Badger claim is progressing well, as is also that of sluicing the Yankee Tunnel; as soon as this is completed tunnelling will be resumed with all speed. There has been a small amount of business transacted during the

Soon as this is completed tunnelling will be resumed with all speed. There has been a small amount of business transacted during the week, and prices remain without alteration.

Great Vor, 1½ to 2; the quarterly meeting of shareholders was held on Thursday (reported elsewhere), when the balance against at the mine was shown to be 2602L. including the liability on relinquished shares, not due until July next. To meet a portion of the liabilities and carry on the operations during the next three months, a call of 5s. per share was made. The agents reported that in view of the present depressed state of the tin market, they had suspended all operations in the mine, except sinking the engine-shaft; and with the new stamps at work on the refuse stuff on and shout the old dressing-floors, they had every reason to believe they would nearly cover cost in the future. Penstruthal, 7s. to 9s.; all work progressing with regularity, and the mine being opened up with vigour. Great West Van, 10s. to 15s.; the coming open seam will enable a favourable change to be shown in the position and prospects of this mine. Cathedral, 1½ to 1½; the increase of the capital of this company by the subscription of 7500L has met with marked approval. The productive character of the lode in the shaft fully justiles the high opinion entertained of this property. Subjoined are the closing quotations—
Carn Brea, 30 to 33; Devon Great Consols, 3¼ to 4¼; Dolcoath, 34 to 36;

East Caradon, 1½ to 2; East Lovell, 3 to 5; East Van, 11 to 12; Great Laxey, 17½ to 18; Great Wheal Vor, 1½ to 2; Hingston Down, ½ to ½; Marke Valley, 2½ to 2½; Pateley Bridge, 5½ to 5½; Parys Mountain, ½ to ½; Pennerley, 2 to 2½; Penstuthal, 6x, to 8s, Roman Gravels, 13½ to 11; Tankerville, 11 to 11½; Tincroft, 18 to 19; Van, 39½ to 40½; Van Consols, 1½ to 2½; West Assileton, 1½ to 2; West Chiverton, 18 to 19; West Basset, 4 to 5; West Pateley Bridge, 5½ to 5½; West Arskerville, 1½ to 2½; Wheal Grenville, 1 to 1½ (tall pail); Aimada and Tirito, ½ to 3½; Argentine, 6½ to 7½; Birdseye Creek, 1½ to 2½; Alburtain and Tarito, ½ to 3½; Argentine, 6½ to 7½; Birdseye Creek, 1½ to 2½; Blue Tent, 3½ to 4; Cape Copper, 37 to 39; Cedar Creek, ½ to ½; Colorado Terrible, 1½ to 1½; Chontales, ½ to ½; Condes of Chill, 6½ to 7½; Don Pedro, 7s. to 9s. Eberhardt and Aurora, 7½ to 1½; East Chance, ½ to 1; New Quebrada, 3½ to 3½; Rickimond Consolidated, 6½ to 6½; Rossa Grande, 2s. 6d. to 3s. 6d.; St. John del Rey, 365 to 385; San Pedro, 1½ to 2½; South Aurona, ¾ to ½; Sweetland Creek, 2 to 2½; Tecoma, ½ to ½; Great West Van, 11s. to 13s.; Exchequer (Gold), 1½ to 1½; Cregon (pref.), 4 to 4½.

If to 2½; South Aurora, ¾ to ½; Sweetland Creek, 2 to 2½; Tecoma, ¾ to ½; United Mexican, 2½ to 2½; Creat West Van, 11s. to 13s.; Exchequer (Gold), 1½ to 1½; Oregon (pref.), 4 to 4½.

COLLIERIES,—The market for colliery shares has been very dull all the week, few transactions having taken place, and prices being consequently without material change. Bona fide investors in this class of security seem, however, to be alive to the advantage of buying in a low market, and what purchases there have been, have been for investment. The generally depressed state of all the share markets, almost culminating in a semi panic on Wednesday, proves by comparison with what favour good collieries are looked upon, and this remark applies especially to the South Staffordshire coal fields, which, situate in the nidst of a large and still growing manufacture, are attracting more and more the attention of capitalists. In this districts the prices of coal are from 12s. 9d. to 14s. 6d. per ton, and of slack 2s. 6d. to 7s. 6d. ton, giving an average of about 10s. 6d. per ton, while the cost of raising ranges in the well-managed collieries from 5s. 6d. to 6s. per ton, so that even now the South Stafford-shire owners must be making some 4s. to 5s. per ton profit. The following are the prices of South Stafford-shire shares:—Cannock and Wimblebury, ¾ to 1½ prem.; Cannock and Huntingdon, 1½ to 1½ prem.; East Cannock, 74s. to 76 prem.; I'vy House, ¾ to ½ dis.; Mid-Cannock, 26½ to 26½; Perry Colliery, ¼ to ½ prem.; Bandwell Park, 27 to 29; Sandwell New Shares, 17½ to 18½ prem.; West Cannock, 2½ to 3½ prem.; Hamstead, 1½ to 2½ prem. Spon Lune, ¾ dis. to ½ prem. Shirther and North Derbyshire was been issued this week at the rate of 7½ per cent. per annum. This has hitherto proved these four bards and were finished to fully 1060 tons per day.

A meeting of colliery-owners in South Yorkshire and North Derbyshire was being pushed on satis-actority, and it is anticipated that the raisings will be increased when they are clinished to fully 1060 ton

reductions.

Indignation meetings amongst the colliers are talked of in South Wales, the ground of complaint being the amount of the "Expenses Fund" of the delegates at Cardiff during the formation of the "Expenses Fund" Some of the items of the fund seen extravagantly high, which is much to be regretted, as it tends to make the colliers look with suspicion on a system which might be used with great advantage in the settlement of wages and other disputes. Bilson and Crump shares done at 7½ to 8½; Chapel House, 3½ to 3½; Cardiff and Swansea, 2½ to 2½; Altami, par to ½ prem., in demand; Ebbw Vale, 19 to 17 dis.; Ifton Rhyn, ½ to 1; New Shariston, 4 to 5; Pelsall, 6 to 4 dis.; Thor, 5 Gawber, 4 to 5; West Mostyn Coal, 12 per cent. preference, 2½ to 1½ dis.; Llay Hall, 9½ to 10; Mold Argoed, 4 to 5.

HALIFAX.—March 30: The following quotations are from Mr. J. H. Thackrah's list:—Halifax and Huddersield Union Bank, 29½; Halifax Joint-Stock Bank, 28½: Halifax Commercus Bank, 24½; London and Yorkshire Bank, 27s. 6d.; John Crossley's, 13½; Whitworth and Co., 8½: Elland Gas, 20; Rastrick Gas, 18½; Bradford Brick and Tile, A, 21, ex div.; ditto B, 7½, ex div.; Charlestown Brick and Tile, 9½; Ripponden Commercial, 11½; Hebela Bridge Cotton, 10½; Yorkshire Boiler Insurance Company, 22s. 6d.; Norton Brothers, 8.

The creditors of the Bettws-Llantwit Colliery (Limited) are re tested to send particulars of their claims to the liquidators by May 1; and those the Rookhope Valley Mining Company (Limited) by April 8.

The creditors of the United Bituminous Collieries Company (Limited) in the liquidator by April 15.

The creditors of the United Bituminous Collieries Company (Limited) are requested to send particulars of their claims to the liquidator by April 15. A petition for winding-up the Cornwall Chemical Company (Limited) is to be heard before Vice-Chancellor Hall on April 7.

A petition for winding-up the Langley Mill Steel and Ironworks Company (Limited) is to be heard before Vice-Chancellor Hall on April 7.

Mr. Wim, Joseph White (W. J. White and Co., King-street, Cheapside) has been appointed by the Master of the Rolls official liquidator to the Malvern Hotel Company (Limited).

Vice-Chancellor, Sir Richard, Maling has appointed Mr. Arthur

otel Company (Limited).

Vice-Chancellor Sir Richard Malins has appointed Mr. Arthur opper (Cooper Brothers and Co.), of George-stre t, Mansion House), the official pudstor of the Coal Consumers' Association (Limited). The company was formed 1873, and numbers over 7000 shareholders, and there are upwards of \$10 cre litors.

WEST TANKERVILLE .- The boundary shaft is down to the 75 fm west tankerville.—The boundary shaft is down to the 75 fm. level. The 63 south is worth 22l per fathom, and Nos. 1 and 2 stopes in this level each 30l, per fathom. The 50 south is worth 15l, and Nos. 1 and 2 stopes 45l. and 15l. respectively. The two stopes in the 46 are each worth for lead and blende 25l. per fathom; these points together being worth 207l. The next sampling will be next Thursday.

ROOKHOPE.—There are now 30 men stoping ore ground, the lode in different places varying from 10 cwts. to full 2 tons per fathom, being best in the back of the 25. The 42 is about to be resumed, and will be driven up under the winze in the 25, where the lode was valued at 6 to 8 tons per fathom, but cannot be continued until drained by the level below. The title of the company is now the Rookhope Lead Mining Company (Limited), not Rookhope Valley, &c.

NORTH LAXEY.—According to a telegram just received from Capt. Rowe, the shaft is down 12 fms. below the 121 fm. level; the lode is 3 ft. wide, containing lead, blende, and copper. New levels will soon be commenced. The general meeting is called for April 11.

PLYNLIMMON.—The 24, east of new winze, is worth 13 ton of lead ore per fathom, and the rise in roof of stope over the 24, is worth 2 tons per fathom.

DYLIFFE LEAD MINES (now Great Dyliffe).-This mine sold on March 24, 100 tons of lead ore at 15l. 5s. per ton, equal to 1522l., being the produce of one month, which will leave a profit of over 450l. on the month's workings. This property was more familiarly known as Bright and Cobden's mines, which gave enormous profits to the proprietors. The shaft is now nearly complete to sink on the course of the Dyliffe lode instead of a perpendicular shaft; when this is accomplished greater facilities will be made for the output of ore.

BRITISH LEAD MINES.—We are informed that a FOURTH edition of Mr. Murchison's pamphlet will be published early in April. It will be revised throughout, and contain latest information of importance.

#### FROM A LONDON STOCK BROKER'S CIRCULAR.

For the last few days the foreign market has been in a state of For the last few days the foreign market has been in a state of penic—Egyptians and Argentines have fallen heavily, the former on foreign selling, and various adverse rumours. Russian stocks, which have always stood firm, and been considered a first-class security, have also suffered in the general collapse. Egyptians have fluctuated violently, and show a fall of from 5 per cent. to 8 per cent. for the week. Turkish have declined on the announcement that the dividends on the 6 per cent. loans, due in April, will not be paid until July next. The railway market has shown less excitement, the fluctuations during the week not being of an extreme nature. The settlement of not be paid until July next. The railway market has shown less excitement, the fluctuations during the week not being of an extreme nature. The settlement of a Robert March and the "account," which was concluded yesterday, passed off more satisfactorily than was at one time anticipated, there being only one defaulter. There is very little business doing, the public apparently holding aloof whilst the markets are in such an unsettled condition.—March 31.

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Date.	Mines.		A D				Purchasers.
March	25-Llanchaiadr	12		£14	10	0	Panther Lead Company
march	27-Great Laxev	100		23	12	6	Weston, Son, and Co.
	28 - Monydd Gordd	u 20		17	2	6	Walker, Parker, and Co
	29-Nantiago	20		14	16	0	Nevill, Druce, and Co.
	-Pennerley	80		14	17	0	George Burr.
	30-Wye Valley	40		14	19	0	Nevill, Druce, and Co.
					-		_
		B	LEI	ND	E.		

Price per ton. Purchasers. ... £ 4 7 0 .... Kenrick and Son. Date. Mines Tons. March 20-Monydd Gorddu... 10 ......

BLACK TIN. Date. Mines. Tons c. q. lb Price per ton. Amount. Purchasers. March 27—Balmynheer ... 1 10 3 2 ... £40 0 0 ... £ 61 10 8—Tamar Co.

COPPER ORES. Date. Mine. Tons. Price p. ton. Amount. Purchasers.

March 30—Parys Mountain... 60 ... £4 6 6 ... £29 10 0 ... £8. Helen's Co.

ditto ... 180 ... 1 12 0 ... 256 0 0 ... H. Baxter.

### Notices to Correspondents.

- Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt; it then forms an accumulating useful work of reference.
- OCHRES.—I would thank some correspondent of the Journal to give me any in formation as to buyers of red and yellow ochre deposit, the value of pure samples per ton, and whether the presence of organic matter is injurious?—G. B. L.: Prestompans.
- Prestonpans.

  BHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for invesiment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

  CORNWALL CHEMICAL COMPANY.—The continuation of this paper will appear in next week's Journal.
- next week's Journal.

  Received, J. R." (Glasgow)—"T. N." (Macelesfield)—"J. G." (Aberystwith)—
  "M. J."—"B. S." (Maidenpek)—"N. J. B." (Wesford)—"M. N." (Neath)—
  "E. F. D." (Arizona)—"J. G. C."—"A. P." (Rosewarne United)—"W. S. (Penstruthal)—F. L. A. T. Rodda (Wheal Grenville)—"J. C. G." (Glasgow)
- (Penstruthal)—F. L. A. T. Rodda (Wheal Grenville)—"J. C. G." (Glasgow): Next week.

  Infortant Notice—Reduction of Postage on the "Mining Journal."—In consequence of the new Postal Conventions, which came into operation on July 1, the postage of the Mining Journal to many countries will be reduced to one fourth. Henceforth the abscription will be 1l. 10s. 4d. per annum (39 frs.), postage included, for the following countries. The amount will, if desired, be collected at the subscriber's residence at the end of each year. The subscription continues until countermanded:—Austria, France, Belgium, Denmark (including Iceland and the Farce Islands), Egypt, Germany, Gibraltar, Greece, Heligoland, Italy, Luxemburg, Netherlands, Norway, Portugal (including Madeira and the Arores), Roumania, Russia, Servia, Sweden, Switzerland, United States, Malta, Turkey, Morocco, Tunis, and the Canary Islands. Spain Il. 19s. (60 frs.)

  Avis Important—Aux Abonnes etrangers du "Mining Journal four bien des pays dont le taux des postesétait jusque là bien elevé. A partir du ler Juillet 1875, une grande dimination du prix de l'abonnement du Mining Journal pour bien des pays dont le taux des postesétait jusque là bien elevé. A partir du ler Juillet le prix de l'abonnement est de 89 frs., le port compris, pour l'Autriche, Belsique, France, Danemarck et ses dependances, Romania, Russie, Servie, Suede, la Suise, la Tarquie, l'Afrique septentrionale, etc. Le montant, si l'on le veut, sera touche a domicile, la fin de l'an. L'abonnement continuera sauf avis contraire.

## THE MINING JOURNAL,

Bailway and Commercial Gazette.

LONDON, APRIL 1, 1876.

THE SPANISH GOVERNMENT, AND THE SPANISH ORE TRADE.

It becomes of greater importance daily that there should be It becomes of greater importance daily that there should be no impediments which are capable of being removed in the way of the widest development of the great and growing steel industry. It is well known that the quality of the steel turned out not only depends upon the careful treatment which it receives during the process of manipulation, but also, and in a much greater degree, upon the quality of ore with which the furnace is charged. The ore which is obtainable on the West Cust has been found to possess those qualities that cartifulate it the making of first-class steel in a more marked. lity of ore with which the furnace is charged. The ore which is obtainable on the West Coast has been found to possess those qualities that contribute to the making of first-class steel in a more marked degree than that to be got in any other part of the United Kingdom; but a few commercial men who have had their wits about them have for some time been looking out for an ore even superior to this, and their efforts have been crowned with success, and with a success in some instances surpassing their highest expectations. Men well acquainted with the mining of ironstone and with those geological features of a country which indicate the existence of a valuable mineral have been dispatched to, amongst other countries. Spain, and the reports which they have from time to time forwarded to those on whose behalf they have conducted experiments have, in the largest number of cases, been so favourable that negociations have at once been entered into for the purchasing of property in that country, where ironstone of a very superior nature has been proved to lie. The purchasers of such property have, of course, had in view the exporting of the mineral mined to the shores of England, generally to be used up by themselves in the producing of steel, but sometimes to be sold to iron and steel making firms with whom they have no connection, but who, they find, are not loth to pay for it a much higher figure than they would have to give for native mineral. We know of instances in which keen men of business, having found out the value of their hidden treasure—for treasure it no doubt is—have made preparations for the raising and exporting of it to supply their own furnaces with the chief means of turning out large out the value of their hidden treasure—for treasure it no doubt is—have made preparations for the raising and exporting of it to supply their own furnaces with the chief means of turning out large quantities of steel when the demand for the metal sets in in full vigour, which are very extensive, and have involved the outlay of a considerable amount of capital. In some cases, where the property purchased has been in the interior of Spain and some distance from any line of railway, the owners, considering the large sum of money which the undertaking would swallow up, have thought it advisable to get others to join them, and so form a company. An instance of this has occurred at Sheffield, where, when a few years ago the demand for Bessemer steel was so urgent, several English capitalists, with Sir John Brown at their head, were wise and fortunate enough to secure a concession of one of the most valuable beds of hematite ore to be found in the world. It was Spanish soil, and they acquired the sole right to work a large district, where, although the soft surface ore had been dug long ages before, yet remained comsoft surface ore had been dug long ages before, yet remained com-paratively virgin soil.

soft surface ore had been dug long ages before, yet remained comparatively virgin soil.

Investors in such iron ore as has and is still being discovered in the dominions of ALPHONSO XII. have not been backward in realising the benefits and advantages which will accrue to the iron and steel industries of this country from the opening up and employment of this ore by proprietors of English mills and forges, and they have not spared any necessary expense which will permit of its use. One concern, whose land lay some 13 miles from the port of shipment, finding that the only means of conveyance had hitherto been mules and bullock carts, has constructed a first-class railway from their mines, which are situated at Galdames, to the coast, and when the cost of this work was added to the sum spent in acquiring a title to the land it was found that an amount of English capital approaching to half a million had been invested. Half a million sterling has not, however, been expended for nothing, for the property which the Bilbao Iron Ore Company has purchased, and in part worked, is described as being literally a mountain of iron. The recent Carlist war has prevented the using up by English steel makers of so much Spanish ore as they would like to have been able to get for the carrying on of their furnaces, and they have had in consequence to purchase more freely from Barrow-in-Forness than they had contemplated. The railway constructed by the Bilbao Iron Ore Company had just been got in full working order, and large quantities of the mineral were being expected by English manufacturers from that source when the civil war broke out, and altogether stayed its exportation. Now, however, that peace has been restored the ironstone will be shipped to this country with alacrity, and English consumers will thereby largely benefit. Much impediment stayed its exportation. Now, nowever, that peace has been restored the ironstone will be shipped to this country with alacrity, and English consumers will thereby largely benefit. Much impediment has been placed in the way of the opening up of this splendid Spanish ore by the course of action which the native Government have pursued. It may be that they are jealous of the foreigners, and are beginning to think themselves capable of making iron and steel in large quantities, so as to be able not only to supply their own wants, but to compete with other manufacturers in the markets of the but to compete with other manufacturers in the markets of the world. The course of action of which we speak, and of which those ateal producers in this country who have purchased large tracts of this Spanish ore are just now loudly complaining, is the imposing of heavy taxes on all the iron ore exported. It is wholly opposed to the agreement which had been entered into with Government sanction before English capital was so largely invested in the country. These duries no doubt tend much to restrict the trade dure; and to These duties no doubt tend much to restrict the trade done; and to

greater or ship tax imposed is merely a piece of useless protectionism. It is by no means certain that the imposition of such a duty does not involve a direct interference with English rights previously guaranteed by the Government. In any case it is evident that to maintain such an export charge must prove highly detrimental to the interests of the Spanish people, since it would lessen immensely the trade at one of their most important harbours (Portugalete, Bilbao) from whence most of the ore is shipped.

It is with great pleasure that we are able to inform those individual manufacturers, or limited liability companies, who, as we have stated, have been for some time endeavouring to induce the Spanish Government to modify, or entirely remove, these obstructions to free trade that they are likely at no very distant date to secure a successful termination of their industry. The young King at the head of the constitution seems to be inculcating a liberal policy, and he is setting himself well to work to improve the condition and see well to the manufacturing interests of his subjects. Evidence that the Spanish authorities find it needful to listen to the remonstances which have been made against these heavy duties is seen in the fact that the Sovereign, accompanied by the Ministers of War and Marine, the civil and municipal authorities of Bilbao and Portugalete, and many of his chief generals, numbering altogether some 130 persons, has now visited the mines at Galdames of the Bilbao Iron Ore Company. The engineer and manager of the company, Mr. Frederick C. Barron, acted as guide, and the whole cortege rode in the firm's rolling stock, which had been suitably draped for the occasion, and upon the firm's railway. It may be of some interest to our readers to say that the train consisted of a locomotive engine bearing the English and Spanish flags in front, and well decorated with evergreens, which, by-the-bye, is quite a novelty to the Spaniards, and eight ballast wagons and one mineral wagon to serve as a break-v

mining resources of the country which he governs, and it cannot be regarded as other than a hopeful sign.

The business of iron ore raising, however, even when the mineral brought to bank is of the quality which is to be found in Spain, has not always turned out to be prolitable. This in some cases may be largely attributable to the export duties of which we complain, but the exceedingly small demand either for steel or iron during the past year has no doubt had much to do with it. Proof of this is found in the circumstance that the shareholders of the Marbella Iron Ore Company, who claim to be the owners of the richest ore imported into England, have received no dividend for the past year's working. The directors, however, are of opinion, that the company is in a much better position than many other concerns engaged in the same business, for though the charge for raising the ores and developing the property have been much in excess of previous years, there has been no actual loss on the year. On Dec. I the company had in stock 30,000 tons of ore, and of this quantity 20,000 tons, we are told, have since been sold "at a price not less than the value at which it was taken over." We quite agree with the directors of this company that a demand for iron and steel is likely at no distant date to set in, and we think they have, therefore, acted wisely in ordering an increased output, and in amply providing for any emergency. At least one Spanish iron ore company believes that it can delver Bessemer mineral of the first class on board at Portugalete for 10s, per ton. As that figure, unweighted by more than the freightage, and such a trifling duty as we have sketched, would go far to afford the relief which the steel industry needs, and as moreover that which promotes the steel will promote likewise the coal interest of this country, we wish all speed to the negociations at which we have hinted. These may be fairly expected to issue in a decided modification, if not, indeed, to hasten the abolition of imposts that we b imposts that we believe high authorities at Madrid have already admitted to be excessive.

#### OUR COAL EXPORTS.

The exports of coal from the United Kingdom have been marching on liberally of late, having amounted to 2,095,954 tons to Feb. 29 this year, as compared with 1,552,691 tons in the corresponding period of 1875, and 1,767 110 tons in the corresponding period of 1874. The great decline which has taken place in the price of coal since the spring of 1874 is forcibly illustrated by the fact that the value of our coal exports to Feb. 29 this year did not exceed 1,231,7351, while the corresponding value in the first two months of 1874 was 1,800,3191. In other words, while the average price of each ton of coal exported in the first two months of 1874 was a little over 11, per ton, the corresponding value in the first two months of 1876 was only about 12s, per ton. The large reduction which has taken place in the price of coal during the last two years has had the effect of stimulating the demand for English combustible in all directions, place in the price of coal during the last two years has had the effect of stimulating the demand for English combustible in all directions, and every consuming neighbour has been purchasing more freely this year. Even Germany, although sending large quantities of her coal to Belgium and France, imported 104,959 tons of English coal in the first two months of 1876. To France we sent 647,582 tons of coal to Feb. 29 this year, against 379,905 tons in the corresponding period of 1875, and 421,823 tons in the corresponding period of 1874. Italy, again, took 19,525 tons of our coal to Feb. 29 this year, while she only imported 107,158 tons in the first two months of 1875, and 145,107 tons in the first two months of 1874. Rassia, Sweden, Denmark, Holland, Spain, Turkey, and Egypt have all been larger consumers of our coal this year. Notwithstanding, also, the increased attention which is being devoted to the utilisation of Indian coal, our exports of coal to British India appear to be gradually increasing.

coal, our exports of the coal exported from our shores to Feb. 29 this year we must add 523,609 tons shipped for the use of steamers engaged in the foreign trade, making an aggregate of 2,619,563 tons. In one form or another the exports of coal from the British Isles are thus proceeding this year at the rate of 15,717,378 tons per annum. The corresponding exports in 1866 amounted to 9,953,712 tons so that the probable progress in the exports during the detons, so that the probable progress in the exports during the decade ending with 1876 inclusive is 5,763,666 tons, giving an average advance of 576,367 tons per annum. It must be admitted that 1876 is still so young that the calculations which we have been making is still so young that the calculations which we have been making are not of much definite or precise value; still there can be no doubt of the general conclusion which we have endeavoured to establish—that our coal exports are increasing at the rate of from 500,000 to 600,000 tons annually. Ever if we take the lowest of these approximate totals we find—assuming that the present yearly rate of increase continues unchecked—that our probable exports in 1906 will amount to 30,717,373 tons. It may be said that the development of coal mining industry in Russia, Germany, Belgium, France. Spain, Turkey, Brazil, the United States, and other countries will check the continued increase which has been witnessed during the last 10 or 20 years in the external demand for our coal. It is cerlast 10 or 20 years in the external demand for our coal. It is certainly quite possible that this may be the case, but the experience which has been thus far acquired upon the subject points, nevertheless, to a contrary conclusion. The fact is that thus far the accumulation of capital and the general progress of manufacturing industry have outweighed every other consideration, and have led to a constant and almost unchecked expansion in the demand for

our coal in foreign countries and the principal British colonies.

Of course, the old question remains whether it is an unmixed advantage that our neighbours and coloniats should be thus continually burning up more and more of our stores of coal, and whether it may not prove to be the case that they are developing their manufacturing industry in reality at our expense. But now that coal has subsided to a more reasonable price in the British isless this con-These duties no doubt tend much to restrict the trade done; and to procure the removal, or at least a great abatement of this impost, at reasonable price in the British isles this constrenous efforts have for some time been put forth. One smaller impost is made professedly to recoup Bilbao for the long and costly siege to which it was subjected. Englishmen are not the men to shirk all claims in such a case, and a tax of this sort may admit of some defence; but though an impost of (say) I real per ton for such purpose might be borne without murmuring, it is clear that the

almost forgotten. During the last two years considerable preparations have been made for extending the previously very considerable yearly aggregate of our coal production. Supply and consumption have been so outstripped by production that prices has fallen from 8s. to 10s. per ton. Under such conditions as they growth of our coal exports is not likely to excite much uncasing

#### CANADA AND OUR RAILWAY IRON.

CANADA AND OUR RAILWAY IRON.

The Canadian Government is rightly or wrongly—and probably rightly—pursuing a vigorous system of retrenchment. In a young part, and, therefore, this action on the part of the Canadian 6, vernment is not, in our judgment, to be overlooked or disregarled. It appears to show—first, a general contraction of enterprise within the wide limits of the Dominion; and, secondly, the consequent is cessity of very considerable caution on the part of English industria in dealing with Canadian railway companies. As regards the Canadian Pacific Railway, the amount which the Canadian Government poses to devote to its construction in its financial year 1876. It is certainly a considerable reduction, but still it can scarcely be said that sea the reduced expenditure is exactly synonymous with an abandant the reduced expenditure is exactly synonymous with an abandant or even an indefinite postponement of the great undertaking. At the same time the fact is tolerably clearly established that the radic will not purchase any steel rails for the Canadian Pinen. Minister devoted \$2,000,000 to the purchase of steel rails but the Canadian budget for 1876-7 this item is altogether struck out. The total of \$2,810,000 proposed to be expended upon the Canadian Pacific line in 1876-7 is made up thus—Telegraph line and we struction of roadway, \$410,000; Penubina branch, \$100,000; Generating that these figures, although they indicate present depression are after all not without some encouragement as regardat the future since they show tolerably clearly that the Canadian Pacific file.

Red River, \$300,000; Mainland British Columbia, \$500,000. We repeat that these figures, although they indicate present depressing are after all not without some encouragement as regards the future, since they show tolerably clearly that the Canadian Pacific Railway is not by any means relegated to the fate and condition of fagotten abortions. Another feature in the Canadian budget which confirms us in this conclusion is a proposed outlay of \$500,000 for addition to the \$2,810,000 already analysed) upon further Pacific Railway surveys and engineering. Altogether, the Canadian facilway surveys and engineering. Altogether, the Canadian facilway surveys and engineering. Altogether, the Canadian facilway serious dependent, the corresponding onlay in 1875 having been \$7,504,000. The \$4,385,000 proposed to be expended in 1876-7 is made up thus—Intercolonial Railway completia, \$500,000; extension into Halifax, \$175,000; to deep water at \$2,500,000; extension into Halifax, \$175,000; to deep water at \$2,500,000; Pacific Railway, \$2,810,000; and Pacific Railway survey and engineering, \$500,000. The Canadian Government can except be charged in the presence of figures like these with an abandament of the important work and duty of Canadian railway consingtion. Neither is the work of Canadian railway development, through the medium of private enterprise, by any means at a standstill. At the same time it cannot be denied that Canadian railway cellis is sick—almost hopelessly sick—and that Canadian railway etclisis sick—almost hopelessly sick—and that Canadian railway etclisis sick—almost hopelessly sick—and that Canadian railway etclisis capital in the establishment of additional railway communication upon the sid the Dominion; but they are clearly very indifferent indeed whelly this capital ever receives the remuneration to which it is legitimate entitled. We may point to the Grand Trunk Railway of Canadian the Grand T

this capital ever receives the remuneration to which it is legitimal entitled. We may point to the Grand Trunk Railway of Canada the Mestern Railway of Canada, and the Midland Railway of Canada in support of this conclusion; and what is still worse, is Canadian Government has of late positively encouraged them struction of competing lines, thus destroying in one or two instance the last lingering hope of ultimate profit.

MINING IN CARDIGANSHIRE .- Amongst the many mines to which MINING IN CARDIGANSHIEE.—Amongst the many mines to which public attention has been lately called on account of the successful development of East Van the Temple Mine may be specially medicated, and considering the many advantages which are claimed in it by the proprietors, it appears strange that it has not been write more extensively. Saveral lodes have been discovered in the eta amongst which is the champion lode of the district, formerly known as the Ystymtyhen, but now called the Van lode. An adit has been commenced on this lode as well as another lode to the south called Pryce's, from the name of the discoverer. The adit level (No. line Pryce's lode was commenced a short time since, and lead or me immediately discovered, and a winze was commenced in the button of the level to prove the continuance of ore downward; at the of the level to prove the continuance of ore downwards point the lode is 6 ft. wide, producing about 1 ton of lead per the end of the adit level only in the mountain 12 fms. produced and blende of considerable value. The intention of the Tempany is to drive a series of adits into the mountain, which rapidly from the bed of the River Rheidol to the height of which they anticipate will prove very remunerative, as the which they anticipate will prove very remunerative, as the will be obtained without the cost of raising, or the expense of paping water, and seeing that the mine may be thus developed and worked to a depth from the highest point of the mountain 100 fms., and to the extent of one mile on the course of the loss the most favourable results may be expected. Another mise allogreat distance from the Temple, possessing the same advantages those above alluded to, has lately come into the market in 21 since, which shares are now selling, and much in demand at 61 preside. which shares are now selling, and much in demand, at 6.9 12½ per cent. having been paid from the profits of a few working. Several other properties in this part of the cobeing worked on a small scale privately, and from the develop which no doubt some valuable mines will be discovered.

THE COAL AND METAL TRADES AT BERLIN.—From a just lished Report to the Foreign Office on the Trade and Industry Berlin in 1874, we learn some particulars which are worthy for respecting the coal and metal trades in the capital of the Gene Empire. Owing to the extraordinarily high price of English Westphalian coal Stettin and other places in the Baltic, Mr. Ni s. n. tells us, were forced to supply themselves to a great degree Silesian coal. The large increase (which is a noticeable feature the tables given) of Upper Silesian pit coal imported into Britangely due to the English gas establishment there having drams supplies from that quarter. English coke has been almost entitle displaced by that from Westphalin, and as the results of the Silesian and other German coal were satisfactory it is thought consumers will continue to employ them. The production of consumers will continue to employ them. The production reased, but the consumption decreased, and until the has resumed its activity the coal trade cannot be expect prove. The year was not a satisfactory one in the iron trade generally. Owing to the over-production of the y prices went down, and there was less demand. Scotch gever, fetched such high prices that the smelting worken to employ Silveian iron but ware not exceesing a its fifth. to employ Silesian iron, but were not successful uncertain. No iron plates were imported from England, man manufacturers were able to keep the market suppli-prices. Large quantities of Australian and Peruvian tin prices. Large quantities of Australian and Perlivind in ported, but there was hardly any room for profit in the trade, of which Spain furnished considerable quantities, was in the demand, and fair prices were obtained. A large quantity of mony was imported from England, and English and Austraphysical Science also imported. copper were also imported.

COAL AND IRON IN THE UNITED STATES. -The Philadelphia all COAL AND IRON IN THE UNITED STATES.—The Philadelphia and Iron Company has met with an abundance of gold coal in sinking a shaft at Middle Creek. The Philadelphia all Reading Coal and Iron Company has started the Plank Rides all Merriam Collieries to fill furnace orders, but will ship from that only large sizes of coal. The Philadelphian coal markets have leavely supplied with coal, notwithstanding a recent suspense of well supplied with coal, notwithstanding a recent suspense mining operations. The movement of coal over the Lehigh fally mining operations. The movement of coal over the Lehigh fally all, 150,660 tons in 1874. The years commence with Dec. 1, and ed. 4,150,660 tons in 1874. The years commence with Dec. 1, and ed. T

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berland Maryland district last year were 2,342,773 tons, against 2,410,895 tons in 1874, showing a decrease of 68,122 tons last year. In the course of last year the Pennsylvania Railroad Company laid In the course of last year the Pennsylvania Railroad Company laid of 6895 tons of steel rails upon its main line; this amount was down 6895 tons of steel rails upon its main line; this amount was down 6895 tons of steel rails upon its main line; this amount was long to the pennsylvania of the pennsylvania

and at points on the branch lines where a neavy traine is nandled.

TESTING SAFETY-LAMPS.—At a meeting of the Académie des Sciences, M. Daubre stated that in the petroleum mines of Alsace the miners were obliged to test their safety-lamps before going the miners were obliged to test their safety-lamps before going the miners were obliged to test their safety-lamps before going the miners was done in the following manner:—At the bottom of an open jar is placed a small quantity of petroleum spirit, the vapour of which, mingling with the air in the jar, forms an extension mixture. The lamp is plunged into this mixture, and the slightest defect in the lamp is proved by a slight explosion. It is desirable that some such system of testing should be adopted in our collicities. collieries.

### REPORT FROM CORNWALL.

REPORT FROM CORNWALL.

March 30.—There does not seem much hope of an improvement in the tin standard yet, the Banca sale notwithstanding, for although the average price realised was nearly equal to 85% in London, it must be borne in mind that not a third of the quantity offered for sale was disposed of. Under the present state of affairs stocks must accumulate, and, whatever temporary improvement there may be, there can be nothing substantial until supply and demand become more equalised, and here everything is against. Circumstances have caused the Australian tin to be thrown upon the market more have caused the Australian tin to be thrown upon the market more have caused the Australian tin to be thrown upon the market suffers in to sown special causes of depression, the tin market suffers in to tis own special causes of depression, the tin market suffers in the greater will be the accumulations, and while the action taken by the tin-plate makers to reduce their output may by-and-bye spur that manufacture into vitality, the benefit that Cornwall is to derive therefrom is very doubtful. A steady demand is always better than a spasmodic.

that manufacture into vitality, the benefit that Cornwall is to derive therefrom is very doubtful. A steady demand is always better than a spasmodic.

However, there is no doubt that production will be checked. However, there is no doubt that production will be checked. Whatever may be the case in Australia—and it is more and more to the test of the country were—it is clear that, under the present ous districts of that country were—it is clear that, under the present ous districts of that country were—it is clear that, under the present condition of working and dressing, existing prices cannot pay the condition of working and dressing, existing prices cannot pay the costs of extraction, except where the tinstuff is far superior to the average quality. Some large mines are now treating stuff with only average quality. Some large mines are now treating stuff with only work from underground, as every ton is raised at a positive loss. Buthiscannot last, and already we find that while in some directions men are being discharged, in others wages are being reduced. This is exceedingly unpleasant, but how is it to be avoided? Miners in Cornwall have never been overpaid; yet it cannot be expected that the mines shall be carried on with the sole idea of finding them employ. It is inevitable at the present juncture that the burden ehould be distributed over all concerned; and the real point at issue is whether mines shall be reduced and kept going, or knacked altogether, or whether, by reducing cost in every direction, they shall fight on through the bad times. Surely half a loaf is better than no bread. It is fortunate that copper is looking up a little, for judicious speculation in copper mining just now may be of very material value to the general mining interests of the country.

Some curious stories are told as to the adventures of certain explosives intended for mining use. It does not seem to be so generally known by mine agents as it should be that it is necessary to obtain a license to keep gunpowder in stock, an

specting explosive substances being much more stringent than

#### TRADE OF THE TYNE AND WEAR.

March 30.—There is little change in the Coal and Iron Trades here, most kinds of coal are very plentiful, and prices still tend dwnwards. The Coke Trade is a little more steady, and although prices are not high this trade is certainly in a more healthy state than the general coal trade.

The notices of the miners engaged at Netherton Colliery, near the week and About 100 notices with with the week and the province with with the week and the province with with the week and the province with the pr

The notices of the miners engaged at Netherton Colliery, near Morpeth, terminated at the week end. About 100 notices were withdrawn, and the re-engaged men continued to work at the old pit. About 300 men have, therefore, been thrown out of employment by the lying idle of the new pit. Of these it appears that nearly 100 have obtained work at other collieries, and yesterday some of the miners were engaged in removing their furniture from the colliery houses which they have occupied. The families of those who have not been re-engaged, or have not found work elsewhere, will, we understand, be permitted to remain in the dwellingsat the colliery for a time. Trade hasshown a slight improvement at many of the pits in the Blyth and Tyne district during the past forthight.

will, we understand, be permitted to remain in the dwellingsat the colliery for a time. Trade has shown a slight improvement at many of the pits in the Blyth and Tyne district during the past fortnight, and the miners at Pegswood were better employed last week than they have been for some weeks previous thereto.

At Middlesborough on Tuesday the market was flat, and prices were, on the whole, weaker. There was a good attendance. The general quotations were—No. 1, 52s. 6d.; No. 3, 48s.; No. 4 forge, 47s. The enquiries were rather more numerous on speculative account; prices are supposed to have reached the lowest possible point. The rail trade is very flat, although Messrs. Bolckow and Vaughan are about to start the mills with a small order lately received. Rails are 6l. 7s. 6d.; ship plates, 7l. 10s.; puddled bars, 4l. 12s. 6l.; common bars, 6l. 15s. The ironfounders are well employed, and considerable orders remain on hand. The coal and coke trades remain unchanged; prices are tending downwards, though cominolly quoted the same.

The Darlington Iron Company annual meeting was held on Monday. M. Later of the content of the coal and the same.

The Darlington Iron Company annual meeting was held on Mon-y, Mr. Joseph Dodds, M.P., in the chair. The Chairman said the port and balance sheet were of a somewhat unsatisfactory cha-icter, but not more so than might have been expected, considering report and balance sheet were of a somewhat unsatisfactory character, but not more so than might have been expected, considering what had occurred at their last meeting and what they all knew of the state of the rail trade of the North of England. Throughout the past year they had given their careful attention to every chance they had of tendering for the manufacture of iron rails; generally they had been unsuccessful in excepting that the lighter order of rails, and at the present moment there was not a single order on the company's books for heavy rails, such as they manufactured in the first year their existence with so much profit and satisfaction. They had, however, a considerable number of orders for small rails—quite sufficient to employ their small inch mill as it had been for some time past. During the greater put of the past year the mill had been occupied, and the result of that was that they had been able to keep down their payments for interest and fixed charges generally, and the milling the loss that the company must have sustained if their was that he company must have sustained if their under condition, and if their tenders should be accessful they hoped there was a possibility of their starting the second small mill, which they expected would enthe company. In answer to questions, Mr. Dodds said that the loss of the sum graniform had not agreed to make a further abatement of 750%. All the pignon the sails of pig iron would have amounted to nearly 18,000% if Mr. Braingham had not agreed to make a further abatement of 750%. All the pignon they had in hand had now been sold, so that there would be no further loss on the sing of the directors where the subject of adopting the works to some other based in hand had now been sold, so that there would be no further loss on the sing of the directors where the subject of adopting the works to some other based of row manufacture had not been considered; but the directors were unanimously of opicion that it would be better to leave things as they were at

by M. G. A. Lebour, F.G.S.

SAFETY-LAMPS.—Specimens of all safety-lamps are being col-

lected at the Coal Trade Office, in Newcastle, and classed and labelled. When the collection is complete, which will be effected shortly, they will be sent to the Exhibition at South Kensington, London. A large number have been collected, and when complete the collection will be both amusing and instructive. There is also a steel mill, the curious machine which was in use in flery mines previous to the invention of the safety-lamp.

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

March 30.-The South Staffordshire Iron Trade continues in a de March 30.—The South Stanfordshife from frade continues in a depressed state, alike in the pig and finished departments, and we are unable to recognise any improvement since our report of last week. Just now the languor in the demand is aggravated by the uncertainty as to the course of prices on Quarter-day. In the face of this uncertainty, and with the general expectation that whatever change may be made will be in a downward direction, buyers are returnly holding heak all but the most ungent orders. The arrange change may be made will be in a downward direction, buyers are naturally holding back all but the most urgent orders. The arrangements in connection with the new wages scale in the iron trade are making satisfactory progress, and there is hope of relief being afforded in this direction, as well as in the price of fuel, in the existing high rate of production. Current rates for pigi-iron range from 2l. 17s. 6d. for common cinder, to 4l. for all-mine of good though not the best quality. These rates are, however, in the present state of business almost nominal, large quantities of pig-iron coming into the district for local consumption from outlying centres of the trade. Stocks of local-made pig-iron are increasing, notwithstanding that out of a total of 160 blast-furnaces in the district little more than 60 are now in operation. The finished ironmakers have, more than 60 are now in operation. The finished ironmakers have, as a rule, scarcely sufficient orders to keep their workpeople more than half employed. In addition to the general dulness of trade, local producers have to contend once again, to a considerable extent, with the keenness of rivalry on the part of Belgium and the North

with the keenness of rivalry on the part of Belgium and the North Country home districts.

On Monday the Chillington Iron Company (Limited), and John Bagnall and Sons (Limited), held their half-yearly shareholders' meetings. The proceedings in each case were somewhat breezy, and various questions as to the cost of management, &c., were put with some warmth; but, on the whole, temper was fairly maintained, and confidence in the direction of each concern was expressed almost unanimously. Mr. Barker, of the Chillington Company, expounded forcibly the severe crisis through which the iron trade of South Staffordshire had been called to pass, owing to the high price of labour and fuel, to the consequence of recent legislative enactments, and to excessive local taxation. Under all the circumstances he thought that the shareholders should be thankful for a 2 per cent. dividend when so many concerns had been working at a positive and serious loss. The ray of light in the dark cloud of Messrs. Bagnall and Sons' report (showing a loss of 5000). on the half-year's working) was the welcome announcement that a sum of 30,000. had been recovered from one of the promoters, and that further con-

working) was the welcome announcement that a sum of 30,000. had been recovered from one of the promoters, and that further considerable sums were expected from others against whom legal proceedings had been commenced. The directors have wisely decided that the money thus recovered shall be applied to the extinction of a portion of the debenture bonds.

The Coal Trade of South Staffordshire is very quiet. Several collieries in the Bilston and Darlaston districts, including those of the Bentley Colliery Company (Limited), have during the week been shut down owing to the unprofitable result of coal getting under existing conditions. Scarcely any of the ironstone mines in the district can be worked with profit, nor indeed without loss, and the only coalowners with whom business is at all profitable just now only coalowners with whom business is at all profitable just now are those working the best Thick coal measures around Dudley and West Bromwich, and the Deep coal seam of Cannock Chase, the demand for the latter being principally on account of household con

west Bromwich, and the Deep coal seam of Cannock Chase, the demand for the latter being principally on account of household consumption.

To-day's quotations on the Birmingham Stock Exchange included: Sandwell Park Colliery, 28, sellers; Cannock and Huntington Colliery, 1½ prem., sellers; East Cannock Colliery, 75 prem., sellers; Hamstead Colliery, 1½ prem., sellers; Ivy House and Northwood Colliery, ¾ dis., sellers; Mid-Cannock Colliery, 26½; Perry Colliery, ½ prem., buyers; Spon Lane Colliery, ½ dis., sellers. Colliery shares have a decidedly downward tendency, the result of the temporary depression in the coal trade.

There is nothing of importance to note this week in the condition of the iron and coal trades of North Staffordshire, the depression in each industry being very marked. Ironstone is in plentiful supply at about late rates.

The Blakely Hall Colliery case, which had stood over for a month, was before the Master of the Rolls on Thursday. The plaintiff, Mr. Reuben Plant, sought by his bill to set aside the sale of the Birmingham Blakely Hall Colliery. The defendants to be the trustes for the debenture-holders, and the persons with whom they had entered into a contract for sale. The chief ground of the plaintiff's complaint was that the mine had been sold at an under-value through the mismanagement of the sale. A sum of 17,000% odd had been agreed to be paid by the purchasers, and when the case was before the Court on the lact occasion they stated their willingness to give up their contract. The Master of the Rolls thereapon ordered the case to stand over for a month, to allow Mr. Plant an opportunity of finding another purchaser at an increased price, —Mr. Chitty, Q.C., who appeared for Mr. Plant, said that he had mow found a purchaser in the person of Mr. Thompon, for whom counsel now appeared. He had agreed to give 21,000% for the mine, and to pay 700%, at one. There was this difficulty, that the lessor's consent had not yet been obtained, and it might not be give in the stated of three things—f

#### BOILER EXPLOSIONS.

TO THE EDITOR OF THE BIRMINGHAM DAILY POST.

TO THE EDITOR OF THE BIRMINGHAM DAILY POST,

SIR,—The terrible catastrophe reported in your paper to-day must surely awaken
steam users to a sense of their grave responsibility to the public. The holier at
Messrs, Stone and Co.'s is of the old egg-end type, and was dout-tless worn out, as
your reporter says it has been there 10 years, and when placed there was secondhand, some of the rent pieces of plate being, after the removal of the scale, not
much thicker than a penny. An engineer of large experience corroborates this statement to me this morning. The whole matter of boiler explosions becomes very
serious when we remember that during the last ten years upwards of 609 people
have been killed and 1000 jn jured from this cause; and the question naturally arises,
How many of these casualties are preventible? Almost all. Mr. Ramsbottom
says that in all his engineering experience he had, among the large number of
boilers for which he was responsible, only one explosion which caused loss of life,
and this was when he was young and comparatively inexperienced. The Manchester Steam Users' Association have on their books nearly 3000 boilers, and during 1875 not one of them exploded. Doubless the Midland Boiler Inspection and
Assurance Company could give a like testimony; and it is, therefore, clear that

or it may be, as I have known it, the masonry only keeping the steam in. If men cannot be brought to take such steps as referred to, from a feeling of humanity (to say nothing of self protection), why should there not be a Beard of Frade enquiry, as in the case of railway accidents, and where culpability is proved damages granted to the unferers? I append a list of explosions, &c., which have taken place during the past three years, as given by Mr. Edward B. Marten, of the Midland Boller Inspection and Assurance Company, and hope that you, Sir, will consider this grave question not only worthy of type for my letter, but of comment in your columns, which will spread it far and wide among, not only the masters, but the men of this grave manufacturing town, whoselives are often placed in jeopardy. Sohe Foundry, Smethwick, March 30.

Year.

Year.

No. of explosions. Killed.

	expl	osions.	Kille	ed. I	njured.
*************************	78		57		. 85
****************************	68	************	81	**********	. 142
			-		
Total	222	***********	215	************	. 425
		79 76 68	79 76 68	78 57 76 77 68 81	No. of explosions.   Killed.   I   78   57

#### REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

March 30.—It would certainly be refreshing once more to write hopefully of the staple trades of the district, but it is impossible, judging from present appearances, to prophesy any movement for the better, at any rate in the immediate future. There was a rumour a few days ago that there was a probability of Cyfartha Works being once more set in motion, but this report requires confirmation, and in some quarters is even contradicted. The strikes of nail-straighteners at Ebbw Vale and Tredegar have now been settled, and several hundreds of men, who by the action of a few had been thrown out of employ, have gone joyfully to work. From all parts of the district the news of reductions in the wages of ironworkers come to hand day after day, and among othersit is stated that the ironworkers employed by the Ystalyfera Iron Company have agreed to accept a decrease in wages of 7½ per cent. Not so the men at the College Ironworks, Llandaff, who have refused to allow 10 per cent. being taken off their pay, as they allege they are already underpaid, compared with workmen in a similar position. A strike is imminent. The trade in plates is still fairly active, and it is gratifying to be able to report that during the last week the exports of iron cleared from the ports of the district show an increase over last. The works are chiefly engaged on Swedish, Italian, South American, and a few colonial orders.

One of the rail-straighteners who was on strike at Tredegar, and colonial orders.

colonial orders.

One of the rail-straighteners who was on strike at Tredegar, and in whose place a new hand had been engaged, fell foul of the latter, and was fined a day or so ago by the magistrates for intimidation. Speaking of the Coal Trade it, too, cannot be said to show many signs of a hopeful nature. The steam coal trade is rather dull, and but a moderate demand for house qualities exists. Patent fuel, as has been the case of late, is a slow sale. The disputes in the anthracite district have not yet been adjusted. At Yniscedwin the colliers are still out on strike, this making 13 weeks they have been idle. The award of the arbitrators in the wages dispute which had occurred at Dynevor, Duffryn, and Neath Abbey collieries, as well as at the pit belonging to Messrs. Evans and Bevan, has now been given. They declare a reduction of 17½ per cent, on the gross earnings for December. The reduction takes effect from the beginning of the year. The strike at the Seven Sisters Colliery, Neath, has also terminated. On the other hand, as a set off to these, stoppages are expected at the Top Hill Colliery, Neath, and Tyrgwyllt Colliery, Llansamlet—in the latter instance the men considered themselves underpaid. It is believed that the suspension of work at the former pit will be only temporary. The Tin-plate Trade still remains in an unsatisfactory condition, and shows no improvement on last week. The dispute at Blaenan Colliery still exists, and hopes of a speedy settlement seem far off at present. Better news comes from the Gilfach Callieries. About 500 persons had heen idle for a week in

The dispute at Biaenan Collery still exists, and hopes of a specify settlement seem far off at present. Better news comes from the Gilfach Collieries. About 500 persons had been idle for a week, in consequence of the men above ground refusing to work, but now the dispute is at an end, the malcontents consenting to refer the

matter to the Sliding Scale Committee.

The Manchester and Milford Railway Bill and the Alexandra (Newport) Docks Bill have been read a second time in the House of Commons, and the latter was ordered to be referred to a select com-Commons, and the latter was ordered to be referred to a select committee. The railway traffic receipts for the week show an increase over those of the preceding week, as well as those in the corresponding week of last year. The Taff Vale Railway Company have been refused locus standi in their petition against the Bill before Parliament, which seeks to amalgamate the Llynvi and Ogmore and Cardiff and Ogmore Valley Railways.

An important decision has been given in reference to Messrs, Ectheryill and Hankay's affairs at the London Bankruptey Court

An important decision has been given in reference to Messrs. Fothergill and Hankey's affairs at the London Bankruptcy Court. The suspension of this firm brought down Mr. Corry with it, who, in the motion before the Court, sought to prove against the estate for the sum of 32,000*l*. the amount of a composition at 4s. in 1*l*. on the large amount of 132,000*l*. in bills on which Mr. Corry was surety for the debtors as acceptor of the same. Some of the creditors had agreed to take debentures of a company formed to carry on the Plymouth and Aberdare Ironworks, representing 20s. in 1*l*. The questions were whether Mr. Corry was entitled to have debentures representing the composition of 4s. in 1*l*. paid by him on the amount of the bills, and whether the bill-holders who had received the 4s. composition on their bills were entitled to have debentures for the full 20s., or whether the 4s. received should be deducted. The Registrar granted the motion of the applicant, with costs, thinking Mr. Corry was entitled to have debentures sufficient to satisfy the 32,000*l*. paid by him. Those creditors who had already had the 4s. 32,000l. paid by him. Those creditors who had already had the of course could only have debentures representing the remaining 16s.

#### REPORT FROM DERBYSHIRE AND YORKSHIRE.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

March 30.—There has of late been a steady output of lead ore at the mines in Derbyshire, but there has not been any new ground broken for some time. A full average tonnage of ironstone is also being raised, but to keep the furnaces full going a large quantity has to be imported from Northamptonshire. The demand for pig, however, is very fair when the general state of the iron trade is considered. Foundry material is in tolerably good request, and the malleable works at Dronfield have been well employed. At the Bessemer Works at the same place the men have submitted to a reduction of wages to the extent of 10 per cent, and have wisely continued at work. The reduction of the miners' wages at the collieries in North Derbyshire is causing some excitement. At the Clay Cross pits the men have refused to accept the 15 per cent, reduction, and are now out on strike against it. The company, however, is not likely to give way, although the cost of keeping the pits idle is something considerable. From Clay Cross it may be said that about 6000 tons of coal are sent to London weekly, but so keen has been the competition of late between the sea-borne and inland coal that prices have oeen the reverse of remunerative. But the workmen cannot recognise such a fact, for whilst their wages are considerably higher than they were in 1871, yet the price of coal at the pits is now lower than it was in that year.

No change has taken place in the Sheffield trades, the heavy platemills being the best employed branch there is, extensive orders being in hand for the Italian as well as other Governments. Ship and

no change has taken place in the Shemeid trades, the heavy plate-mills being the best employed branch there is, extensive orders being in hand for the Italian as well as other Governments. Ship and boiler plates are in tolerably fair request, and the Bessemer works are now favourably off for business, especially in rails. The works in other parts of South Yorkshire are also, as a rule, doing very well. At the Railway Foundry, Barnsley, an increasing business is being done in the patent metallic pistons of Bowers and Qualter, a most and this was when he was young and comparatively inexperienced. The Manchester Steam Users' Association have on their books nearly 3000 boilers, and during 1875 not one of them exploded. Doubtless the Midland Boiler Inspection and Assurance Company could give a like testimony; and it is, therefore, elear that the majority—perhaps all—of these sad accidents are preventible. Then, if such be the case, on whom does the responsibility rest, and what means can be taken to bring it to bear in such a manner that more care may be exercised?

In the first pluce, our experiences shows that people are anxious to get boilers too cleap, and firms of standing, desirons of putting in good material and workmanship, at a fair and remunerative price, are passed by for inferior makers. It is the duty of a buyer to order, and see that he receives, a first class boiler, but he has no right to expect it unless he agrees to pay accordingly. Then the boiler, when put under steam, should be placed in the hands of an intelligant engineman or stoker who thoroughly understands his work. How often is this neglected, and end the beat of boilers. The owner is responsible, therefore, in this case. Thirdly, it is the duty of every steam user—unless he bimself an engineer, or has men dont him with some practical knowledge of steam machinery—to become a member of some association, who serve the double purpose of inspecting a new or second hand boiler when bought, as well as of lier Interval between the set of boilers. The owner is responsible, therefore, in this case. Thirdly, it is the duty of every steam user—unless he be himself an engineer, or has men about him with some practical knowledge of steam machinery—to become a member of some association, who serve the double purpose of inspecting a new or second hand boiler when bought, as well as of like the relation of the best of boilers. The owner is responsible, therefore, in this case. Thirdly, it is the duty of every steam user—unless he be inseed an engineer, or has men about him with some masters, however, are determined in the matter. A meeting was held on Tuesday, at the King's Head Hotel, Barnsley, to take the same into consideration. Mr. Pepper presided. In addition to many of the members of the South Yorkshire and North Derbyshire Coalowners' Association, the meeting was attended by representatives from many collieries not allied with the Association. The present state of trade and the prices paid were referred to, and a unanimous resolution to enforce the full 15 per cent. was agreed to. It is expected that those coalowners who have not as yet given notice will do so at once, so that the notices will all expire about the same time. The men, as a rule, are decidedly opposed to any reduction. Some of the lodges are in favour of no more than 5 per cent. Should both parties adhere to their present proposals, a struggle seems almost a certainty.

or the longes are interest proposals, a struggle seems almost a certainty.

Mr. B. Holgate read a paper before the Leeds Geological Association "On the Uses of the Minerals of the Leeds District." Mr. Holgate spoke of the favourable position of Leeds for the study of the carboniferous system, to the products of which, to a large extent, Leeds was indebted for its commercial prosperity. The minerals of the district are naturally divided into stones of various kinds, iron, coal, and line stone and sand used in the manufac ure of glass. The stone of the district was used, according to quality, for building purposes, tombstones, grindstones, and road metal. The various properties and values of these stones was ably discussed, and comparisons made with specimens from other districts. Under this division ownse the minerals which resist the action of het under certain conditions, such as ganister and the various fire-clays; the uses of these were described, as also this kinds of furnaces for which they are best suited. The iron ore of the Yorkshire district was the best that could be produced in quantity. A detailed description of the various processes of refining and hardening the iron, and also of its conversion into steel, was then given. Speaking of the coal of the neighbourhoood, Mr. Holgate referred to the great waste occurring in its use, and stated that science had done but little as yet to remedy this evil. The difference between house and furnace coal was pointed out, as was also the fact that coal containing a large proportion of sulphur was often used for domestic purposes with deplorable results to pictures. &c. This was, however, very often attributed to the effects of bad gas. The application to the manufacture of glass of the magnesian limestone and its accompanying sand, as found about Castleford, was next explained. A large and valuable collection of specimens were exhibited to illustrate the numerous points raised in the paper. At the close of the meeting the president, Mr. L. C. Miall, F.G.S., said

PROLONGATION OF AN IMPORTANT PATENT.—The Judicial Committee of the Privy Council heard, on Monday, a petition on behalf of George Bowers, ironmoulder, and of John Qualter, of Barnsley, for the prolongotion of letters patent which had been granted to them on April 3, 1862, for an invention of "certain improvements in metallic pistons." Their lordships present were Sir Barnes Peacock, Sir Montague Smith, and Sir Robert Collier. Witnesses having been heard in support of the case, Sir Robert Collier stated their lordships were satisfied that the invention was one of considerable merit, and that the inventors had not received an adequate remuna-PROLONGATION OF AN IMPORTANT PATENT,-The Judicial Comlordships were satisfied that the invention was one or considerable merit, and that the inventors had not received an adequate remuneration. Their lordships had some little doubt as to whether the invention had been pushed enough; but considering the difficulties which attended the efforts of inventors who were working men, their lordships would advise an extension of six years.

#### THE SCOTCH MINING SHARE MARKET-WEEKLY REPORT AND LIST OF PRICES.

During the past week the market has been very quiet. In shares of

of SCOTLAND PEAT FUEL COMPANY.—It appears the

capital having failed, it has been resolved to sell the plant and

capital having failed, it has been resolved to sell the plant and wind up the concern.

Canadian Copper Pyrites and Sulphur Company, on Friday, it was agreed to adjourn for a fortnight, to allow the shareholders time to consider the proposals of the Chairman. These refer to the remuneration of himself and his colleagues for their services, being by his own statement "tolerably stiff." The five directors want 100%, a year, and a tenth of the surplus profits over 10 per cent. during five years; the Chairman wants 100%, a year for himself, and another tenth of the surplus profits; also, if he is obliged to go to Canada, to have the usual terms given to a professional manseven guineas a day and his expenses. The Chairman stated that the company was pro-ably losing 300% to 400%, a year now, but that he looked on the prospects of the concern with more hope than at the last meeting. Mr. Cobley, an expert in mineralogy and in the treatment of copper-bearing ores, had furnished a report, from which they believed that there was a large quantity of copper-bearing ore in their property, which could be brought to the surface at a greatly reduced cost, compared with that necessary to obtain their pyrites from copper as at present: 18 out of the 19 litigations the company was interested in have been compromised, and negociations were in progress for the settlement of the only remaining one. The Chairman was not unhopeful that by this time next year they would be able to say something about a dividend.

Killifreth.—Shares in this mine are at present scarce. The mine continues to open out exceedingly well; and even at the price of 40%, per ton the tin raised will pay working cost, and some say leave a profit. However, should the mine continue as good as it now is, and the price of tin only advance to a moderate extent, it will undoubtedly become dividend-paying, with prospects second to none. The new shaft on the copper lode is nearly down. The amount estimated to be required yet, principally for the purchase and rection of a s

BLUE TENT CONSOLIDATED HYDRAULIC GOLD MINES OF CALIFORNIA (Limited).—It is strange the shares of this company are not beginning to attract more attention now the aqueduct is completed. Dealings in them, however, have never been frequent, the shares being well held. The 5t, shares, fully paid-up, are now only 3 to 3\frac{1}{2}. The company owns an extensive aurierous gravel property, &c., situated on the South Yuba River, and about five miles from Nevada City, Nevada County, California. The ordinary share capital is 150,000t, of which 10,170t has been issued; the balance being retained in hand against 10,000t, worth of debentures, the holders of which have the option of exchanging their bonds for shares. The total debenture debt authorised is 35,000t, and of this above 30,000t, has been issued. As above mentioned, the ditch or aqueduct of about 31 miles in length is now completed; and there being an appearance of a late and abundant supply of water, after the exceedingly severe winter, will enable steady washing to be commenced on three of the company's claims—the South Yuba, Enterprise, and Blue Lead. Seeing that a partial clean-up from South Yuba alone at the end of January realised at the rate of 140t, per day for the number of hours water was used, the prospects now appear good.

THORNHILL REEF GOLD MINING COMPANY (Limited).—The financial position of this company is a balance of liabilities over

prospects now appear good.

THORNHILL REEF GOLD MINING COMPANY (Limited).—The financial position of this company is a balance of liabilities over assets of 11624, but the value of the mine and machinery (the latter being 32324, alone in Mr. Lewis's report) has not been calculated as an asset. The estimated amount required to clear off this balance of liabilities and to recommence and carry on operations at the mine in such a manner as to give resonable prospects of success is 3:004, to 40004. An a tjourned meeting of the shareholders is to be field on April 3, and if the sub-ciptions for the 15 per cent. preference shares the company offer are not then sufficient for the above purposes, the affairs of the concern are to go into liquidation. Seeing the great value of the property is generally acknowledged, the machinery, &c., in excellent order, and that it would, therefore, seem only to want a fair trial to become remunerative, it is the interest of every shareholder, whatever their reasons for withholding support heretofore, not to fail to protect the investment they have made in the company now. It is surely sufficiently plain that it is better to bestire themselves a little at present, and have the concern put on a proper footing, than allow it to be wound-up, lose their capital invested, and then perhaps have the mortification of seeing the concern a success in other hunds.

On WEDNESDAY very little business done. Benhar, 10 to 10 ½. Bolckow, Vaughan, A, done at 41%, closing 41% to 41%. Dunsley Wheal Phemir, 25, to 38. Glasgow Caradon, 1½, buyers. Glyn, 2, buyers. Gunnishake (Clitters), 3%, selfers. Huntington done at 144, closing 13s, to 15s. I X.L. ½ bid. Killifreth, 17s. to 29s. London and Glasgow Engineering done at 21%. Marke Valley, 2½s, selfers. Monkland done at 42s, closing 41% to 43s. Typer cent preference done at 21%, closing 21½ to 21%. Young's Paraffin done at 8½ closing 8½ to 8½.

Subjoined are this week's quotations, &c., of mining and metal shares quoted on the Scotch Stock Exchanges:—

							docations, a.e., or intuing and metal snares qu	loced or
the S	api		OCA		ivid			
	aps	title.						
Per		Pai	a		e per			Y
share					ran			Last
£ 10		up.		revio				price.
		£6		610	4		Arniston Coal (Limited)	71/6
10	***	10	***	14	***	9	Benhar Coal (Limited)	10%
10	0.79	. 6	***	14	****	9	Ditto	6 %
100	***	35	0.00	125			t Bolckow, Vaughan, and Co. (Lim,)	471/2
10		10		10		10	Cairntable Gas Coal (Limited)	914
10		10	***	5	* * *	nil	Chillington Iron (Limited)	43/4
33	***	29	***	7.		- 36	t Ebbw Vale Steel, Iron, and Coal (Lim.)	10%
10	***	. 4	***	nil	***	nil	Fife Coal (Limited)	4
10	***	10		_		_	Glasgow Port Washington Iron & Coal (L)	3
10		10		-		_	Ditto Prepaid	3
10	***	10	***	-		-	Lochore and Capledrae (Limited)	61/2
10	***	10		5 8		nil	Marbella Iron Ore (Limited)	3 1/8
10		10		5		nil	Monkland Iron and Coal (Limited)	424.
10	***	10		7		7	Ditto Guaranteed Preference	414
100		100		nil		nil		30
6		- 5		15		nii		455.
1		1	***	15			4 Scottish Australian Mining (Limited)	154
60	***	50		10	***	5	Shotts Iron	61
10	***	10	***	10	***	5	Ditto New, issued at 214 prem.	1054
	***		***		***	-		1071
							COPPER, SULPHUR, TIN.	
4	+ + +	4	+ 0.9	-		-	Canadian Copper Pyrites (Limited)	
4		3		-	***	-	Ditto (23 paid)	
10	+40	7		20s		20.9	1Cape Copper (Limited)	63
2		2			***	_	Dunsley Wheal Phœnix Tin (Limited)	39.
1		1		125	2	125	4Glasgow Caradon Copner Mining (Lim.).	11/4
1		15s.		125	5		4 Ditto New	225.
10		9		-	***	5	Huntington Copper and Sulphur (Lim.).	149.
258.		234.		romin	***	-	Kapunda Mining (Limited)	24.
4		4		-	***	_	Panuleillo Copper (Limited)	156
10	***	10		61		61	Rio Tinto (Limited)	574
20		20		-			Ditto, 7 per cent. Mortgage Bonds	14
100		100	***	-		_	Ditto, 7 per cent. Mortgage Bonds Do, 5 p. ct. Mor. Deb. (Sp. Con. Bds.)	56
10		10	***	nil		nil	Russian Copper (Limited)	3
10		10	***	25		25	Tharsis Copper and Sulphur (Limited)	2176
10		7	***	25		25	Ditto New	15
1		i		-		_	Yorke Peninsula Mining (Limited)	
	***			_				08. 90.
							GOLD, SILVER.	
1		1	400	5	***	5	Australian Mines Investment (Limited).	34
20	***	20	0.09	-	***	_	Emma Silver Mining (Limited)	15/8
10	***	10		_		-	Flagstaff Silver Mining (Limited)	2
	0.00	5		-		-	Last Chance Silver Mining (Limited)	1
5		. 5		-	440	35	Richmond Mining (Limited)	6 1/4
							OIL.	-/-
10				91	,	5	Dalmans Oil (Limited)	200-
		7		47	ś	-0	Dalmeny Oil (Limited)	
10			****	-			Uphall Mineral Oil (Limited)	5
10		8;	5	5	***	5	Young's Paraffin Light & Mineral Oil (L)	81/2
							MISCELLANEOUS.	
80		25		16		16	London and Glasgow Engineering & Iron	
		_					Shipbuilding (Limited)	2134
20		311	4	_		_	Pernylan Nitrate (Limited)	10
10	***	10		- 8	100	- 5	Scottish Wagon (Limited)	11
10		4		8		- 5	Ditto New	43/
	***		000	4 1	nter		I Per share.	-/4
			Lage				account April 8; settling day, April 12.	
NZ o	-	72	o ab	ove	linta	of	mines and auxiliary associations is as full a	

NOTE.—The above lists of mines and auxiliary associations is as full as can associatined, Soutch companies only being inserted, or those in which Soutch is restors are interested. In the event of any being omitted, and parties desiring quotation for them and such information as can be ascertained from time to time the interested of the self-state of the second to the second of the second of

J. GRANT MACLEAN, Stock and Share Broker.

SILVER.—Before the Select Committee to consider the Depreciation of Silver, Mr. Campbell, manager of the Oriental Bank, said his bank acted as agents for banks in San Francisco and Chili, as well as in the East, and therefore he was acquainted with the move-ments of silver. While in 1868 the import of silver amounted to 10.000,000*l*... it had risen to between 14,000,000*l*. and 16.000,000*l*. in 1871. In 1873 the exports of treasure from San Francisco, which included gold and silver, amounted to 24,000,000%, in 1874 to 30,000,000%, and in 1875 to 42,000,000%. Of silver bar and coins the exports were in 1873, \$5,600,000, and in 1874, \$13,500,000. In the exports were in 1010, \$5,000,000, and in 1074, \$15,000,000. In the same two years the exports of silver to China and Japan from San Francisco were \$8,540,000 and \$8,365,000. The latest news, dated Feb. 14, was to the effect that the output of the Comstock Mine continued most abundant; the Consolidated Virginia lode yielded over \$2,000,000 in January; and when the California lode began yielding in May the combined production of the two would be over \$4,000,000 per month. The ore yielded 40 per cent. of gold and 60 per cent. of silver; the miners were going deeper now, and the deeper they went the richer was the gold. To show that the statistics from America were not always perfectly accurate, witness produced a ship's mani-SOUTH OF SCOTLAND FRAT FUEL COMPANY.—It appears the operations of this company have been still unsuccessful at Racks, to which, it will be remembered, they removed the works some time since; the present plant being insufficient for working at a profit, a deficiency of 2000l, has arisen. An appeal for additional

found to contain 8800%, of silver and 6200%, of fine gold; in the found to contain 8800% of silver and 5-5%, of time gold; in the ports that would all figure as silver. The production of silver Chili was \$3,000,000 in 1873 and in 1874; in 1875 witness firm ceived 600,000% in bar silver from Chili. Very large amounts of the ceived 600,000% of the ceived 600,000%

New Coal Field in Scotland,—The Morningside Colliery Capany, Wishaw, have sunk one of their pits to the seam of coal kan as Lower Drumgray. Last week the seam was cut through found rather thicker than was anticipated. The coal is of an equality, having been extensively wrought in the mineral field Airdrie, Falkirk, &c. In this district it has been exarely touched, only for the proper and thicker seams not being yet exhausted. Its geological proprise about 90 fathons under the Ell coal. At exhausted. Its geological proprise about 90 fathons under the Ell coal. At manifecting the seam is the seam of t

## Registration of New Companies.

The following joint-stock companies have been duly registered The following joint-stock companies have been duly register. CLIFTON ARMS HOFEL COMPANY, LYTHAM (Limited), —C.19ibil. 25. shares. To acquire an hotel at Lytham, Lancashier, usasscripes J. T. Clifton, Lytham Hall, Lytham, 49; S. Waterboro, Lytham, 29; J. B. J. Clifton, Lytham Hall, Lytham, 49; S. Waterboro, Lytham, 29; J. B. Corporation-street, Manchester, 29; E. Cunliffe, Lytham, 29; J. Bowing, Preson, 29; W. SAMDANG TEA COMPANY (Limited).—Capital 15,000., in 8. share, quire ta estates in South Luckimpore Upper Assum. Subscripes, which is a subscripes, and the subscripes of the subscripe

Miller, Toliners, Heriford; E. R. Slocomb, The Hollies, Tedilingon; Tedilingon

cent. on the yearly net profits, provided it does not exceed 3000. Per annus: should the amount fall below 609., the difference is to be made up at annus; should the amount fall below 609., the difference is to be made up out of the succeeding year.

BRMINGHAM ROLLER, SKATE, AND RINK COMPANY (Limited) authority of the states. The acquire patents for ice or roller states authorities (who take one share each) are—J. S. Cockings, 17. Ann stree, limited and the street, Birmingham; B. G. Dauliey, Bernningham; G. J. Rabnet, Prés Coldfield; H. J. Growtage, Belgrave road, Birmingham; H. Ryland, Nest treet, Birmingham; J. C. Dauliey, Bennett's hill, Birmingham; H. Ryland, Nest treet, Birmingham; J. C. Dauliey, Bennett's hill, Birmingham; G. Johnson Waterloo-street, Birmingham.

CANNOCK OLD COPPICE COLLIERY COMPANY (Limited)—Copport, in 1002. shares. To acquire colliery property in the parish of the cribers are—John Storer, Stafford, age and owners and masters the cribers are—John Storer, Stafford, age engineer, 10; William Wyat, Safferd, agencular and, 10; Jaines Dilston, Stafford, age countant, 17; J. Goodall, Stafford, vision merchant, 5; T. Rudge, Stafford, irrolfounder, 5; John Nett, Safferd and the parish facts to the qualification being the holding of five shares.

FRONTENAC LEAD MINING AND SMELTING COMPANY (Limited)—Open Storer, W. Wyat, G. Henshall, J. B. Hackett, George Griffilish, J. Bait the qualification being the holding of five shares.

FRONTENAC LEAD MINING AND SMELTING COMPANY (Limited)—"Frontenac Mine," according to the terms of an agreement med between George Morton in certain mines in the south half of Lot 16, in the Ninhos sion of the district of Loughborough, County of Prontenac, Canala, cibb "Frontenac Mine," according to the terms of an agreement med between Stockwell, for himself, and Googe Morton and G. Gibbs, on behalf of the own The purchase money is to be 50,000 fully paid-up shares of 1/c each, The when are—E. H. Domnithorpe, Colne Lodge, Twickenham, J. L., 5: P. Haris, Lig Scot's Greys, 5: at 500, per annum, to be increased at the rate of 100, per annum force cent. of yearly dividend after the first 5 per cent. up to 20.

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(LIMITED),

Registered under the Companies Act of 1862 and 1867, whereby the liability the shareholders is strictly limited.

Capital £25,000, in 12,500 Shares of £2 each.

£1 to be paid on application, and £1 on allotment; if, however, theco be unable to allot the shares applied for, the deposits will be retur-(To be elected at a General Meeting. Qualification: Twenty five slare)

DANKEM.

NATIONAL PROVINCIAL BANK OF ENGLAND, Exeter, Banking and Hfracombe. JAMES LANGDON, Esq., Boutport-street, Barnstaple.

STEPHEN MATTHEWS, Esq., Moretonhampstead.

Mr. FREDERICK THOMAS, Palmyra House, Exeter. OFFICES: 87, QUEEN STREET, EXETER.

#### ABRIDGED PROSPECTUS.

ABRIDGED PROSPECTUS.

This company has been formed for the purpose of purchasing the less, its and working rights of the very valuable and extensive piece of mineral guisatuate in the silver-lead district of Combunatin, in the north of been, shift ancient and modern times, produced so much wealth, the grant of which lass pany have succeeded in obtaining.

The sett comprises the estate of West Challasombe, and is grantel for atmit 21 years, at the very liberal royalty rent of 1 20th. It extends over liberal mineral ground, about three quarters of a mile long on the course of the blast dividends to its shareholders. And it is a most gratifying fact that a largest of residents in the neighbourhood have notified their intention of becoming the control of the state o

or solicitor; and an init tribecessary to make that. The serimine is careful management and economic outlay. The serithe West Combination sett forms a part, is described by secmineral formation to the productive mines of Germany atrial shafts recently sunk by the advice and under the dire
thews, Eq., Engineer, fully corroborate this opinion.
Mr. Evan Hopkins, F.G.S., considers the features affectinsemble the Maraquita and St. Asa Silver Mines, and believe
of Old Combination Mine continue through this sett.
A high opinion of the richness for silver and ore producing
martin is entertained at the Government School of Mines.
The whole system of lodes show strong indications of ric
and there is every reason to suppose that the ore will assay
extracted from the Old Combination Mines above referred to
as 1200 ounces of silver to the ton in some cases, and in mwas of the value of £200 per fathom.
The row already raised from this sett is of first rate qualit

mine.

The ore already raised from this sett is of first rate quality, and the rest pended to the prospectus from Messrs. Trelease, W. Newton, John Trent Phillips, Kingdon, Ennor, N. Whitley, Hitchins, and others—all unleast thorities on mining matters—show that, under judicious management, i profitable mine will be the reanlt.

Prospectuses, together with plans of the property, forms of applicationed may be obtained, and spectmens of the ore seen, with all information, our standard of the decrease, and the decrease of the ore seen, with all information, on the fleeretary, at the office of the company, and at the office of the semants.

Date IN NAMI OR C.

Bishot be EX Date

SLAT MAN, to MACHI

FOR

NICKI

GOLD JOHN H

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N E

Apply to the

IN THE MATTER OF THE COMPANIES ACTS, 1862 AND 1867, AND OF THE TREVARRACK MINING COMPANY (LIMITED).

OF THE TREVARRACK MINING COMPANY (LIMITED).

THE CREDITORS OF THE ABOVE-NAMED COMPANY are required, on or before the 10th day of April, 1876, TO SEND THEIR FRANCE AND ADDRESSES, AND THE PARTICULARS OF THEIR DEBIS (MES AND ADDRESSES, AND THE PARTICULARS OF THEIR DEBIS (MES) (M

Dated this 28th day of March, 1876.

IN THE MATTER OF THE COMPANIES ACTS, 1862 AND 1367, AND OF THE ST. AGNES CONSOLS MINING COMPANY (LIMITED).

THE CREDITORS OF THE ABOVE-NAMED COMPANY are THE CREDITORS OF THE ADOVE-NAMED COMPANY are required, on or before the 10th day of April, 1876. TO SEND THEIR NAMES AND ADDRESSES, AND THE PARTICULARS OF THRIR DEBTS BE CLAIMS, to me, the Liquidator, at my office, No. 35, Ethelburga House, Be CLAIMS, to me, the Liquidator, at my office, No. 35, Ethelburga House, be Liquidator, at my office, No. 35, Ethelburga House, be ALL The Company of the ASSETS of the Company, made before such debts are claimed.

Dated this 28th day of March, 1876.

THE HENDON SPELTER WORKS.

TO CAPITALISTS, PROMOTERS OF PUBLIC COMPANIES, & OTHERS.

TO CAPITALISTS, PROMOTERS OF PUBLIC COMPANIES, & OTHERS.

TO CAPITALISTS, PROMOTERS OF PUBLIC COMPANIES, attuate at Hendon, Partner, John Candish, M.P., the SPELTER WORKS, situate at Hendon, In the borough of Sunderland, in the country of Durham, carried on under the Medical Companies. The Works are situated within one mile of the well known docks of the port of The works are situated within one mile of the well known docks of the port of The works are situated within one mile of the Well known docks of the port of the works are found to the North Eastern Railway, such that the part of the United Kingdom. Their position, within he communication with all parts of the United Kingdom. Their position, within the chesp importation of raw material, as also the forwarding of the manufactured article either by land or sea.

The ground on which the works are built can be either bought ont or bought on a yearly perpetual ground rent, and any quantity under 20 agrees can be included in the sale.

Let in the midst of the Durham Coal Field fuel of the heat description.

The ground or winder the product of the Durham Coal Field fuel of the best description and best of the product of the Durham Coal Field fuel of the best description on the best description and bottained at a cost below almost any other part of the United Kingdom, income to obtained at a cost below almost any other part of the United Kingdom, for the works contain 24 zins furnaces, capable of producing 70 tons of metal a The works contain 24 zins furnaces, capable of producing 70 tons of metal a fine works contain 24 zins furnaces, capable of producing 70 tons of metal a fine works contain 24 zins furnaces, capable of producing 70 tons of metal a fine works contain 24 zins furnaces, capable of producing 70 tons of metal of sufficient capacity for a much larger number. The works san, therefore, be a sufficient capacity for a much larger number. The works san, therefore, be a sufficient capacity of the metal made at these works is well known, and it, therefore the quality of the metal made at these works is well known, and it, therefore the quality of the sufficient works, and they will be sold subject to all stock being taken at a fair market value.

Only sold the sufficient works and they will be sold subject to all stock being taken at a fair market value.

Only sold the sufficient works and they will be sold subject to all stock being taken at a fair market value.

The purchase can also have the option of buying the CALCINING WORKS the production of the conomical and regular supply of the taw material, and saving the mineowers' and merchants' profits. As the ore from the South of Spain generally comes as ballast for ships laden at the product of the supply of the taw material, and saving the mineowers' and merchants' profits.

As the ore from the South of Spain generally comes as ballast for ships laden, some the product of the supplies of the company.

Further particulars can be had en application to the company.

CORSICAN MINES.

CORSICAN MINES,

TO BE SOLD, ONE THOUSAND SHARES in the LAMA
MINING COMPANY OF CORSICA (LIMITED), THE OLMETA COPPER
MINING COMPANY OF CORSICA (LIMITED). These mines are turning out
are quantities of rich ores, two cargoes of copper having already been received in
his country. There is also a large reserve of ore on the mines ready for shipment,
see mines must shortly take a prominent place in the Dividend List.
For particulars, apply to T. W. DAYLES, Ironmonger, &c., Newtown, Montomeryshire.

SLATE QUARRY FOR SALE, BY PRIVATE CONTRACT. QUARRY, situated about six miles from RAMSEY, ISLE OF with WORKMEN'S COTTAGES, and the WHOLE PLANT and

MA Mostler with WORKMEN'S COLLAGO, MAN Agenther with WORKMEN'S COLLAGO, MACHINERY.
The leaves are held from the Crown at a minimum payment of £52 per annum, The leaves are the leaves have twenty seven years still to run. The slave leaves to 1000 acres, and the leaves have twenty seven years still to run. The slave is a clear blue, and in quantity practically inexhaustible.
Full particulars may be learned on application to Mr. James Stewart, No. 4,

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Fine powdered, beautifully white; also in the Rock or Crude State, free from Lime and Metallic Oxide.
Samples on application to—

RUTHWAIT BARYTHS MINING COMPANY, WHITEHAVEN.

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EAL

POR SALE, a 35-horse power PORTABLE STEAM ENGINE, with link motion reversing gear, ready for delivery.

An Is horse power VERTICAL STEAM ENGINE, with link motion reversing strains of gear to wind and pump. ear, also gear to wind and pump.
A 9 ft. PAN MORTAR MILL, VERTICAL ENGINE, and BOILER.

Apply to-BARROWS AND STEWART, ENGINEERS, BANBURY.

FOR SALE: -

ONE 60 ft. OVERSHOT WATER WHHEL, 3 ft. 6 in. breast, from rings streepiees, shaft, wooden arms, buckets, backing.

ONE 12 ft. by 2 ft. 6 in. ditto ditto
ONE 12 ft. and SET OF STAMPS, complete.

ONE LARGE PUMP CRANK, with four pin holes.

ONE 13 ft. IRON BOB.

EIGHT LARGE GEAR WHEELS.

ONE 6 ft. revolving pan false bottom MORTAR MILL.

A lot of PUMP RODS, JOINTS, TRAM WAGONS, PUMPS, &c., &c.

The whole of the above has been little used; is in good condition; will be sold leap, together or separate. PORTABLE ENGINES, PUMPS, SAW TABLES, always on sale or hire.

POLYBLANK AND CO.,

ENGINEERS AND BOILER MAKERS. NEWTON ABBOT AND DARTMOUTH.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:— REFINED METALLIC NICKEL.

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GERMAN SILVER-IN INGOTS, SHEET, WIRE, &c.
NICKEL AND COBALT ORES PURCHASED.

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NEAR STOKE UPON TRENT, STAFFORDSHIRE
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ONEY ADVANCED. in sums of £500 and upwards, on FREEHOLD or LEASEHOLD PROPERTY, SHARES, STOCKS, and PERSONAL SECURITY.

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CAPTAIN ABSALOM FRANCIS,
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GROGWINION LEAD MINE (LIMITED).

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BROKERS, of EXCHANGE CHAMBERS, CHANGE ALLEY,
LOMBARD STREET, LONDON,
Strongly recommend the ABOVE MINE as one of the BEST and SAFEST
HINGLING INVESTMENTS. The dividends are declared half-yearly—the one for
be last half year was 124 one cont.: the next one will probably be 20 per cent. are valued at £200,000. Every information upon application to

lly Closing Price Lists of Mines and all other Securities sent post free on polication.

Messe, H. H. and Co, are BUYERS of Shares in GROGWINION MINE, and
of Shares in WYE VALLEY LEAD MINE; and they will be GLAD TO
EAR from BROKERS or DEALERS who have ANY FOR SALE.

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COMPENSATION FOR DEATH AND INJURIES

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Caused by
ACCIDENTS OF ALL KINDS,
By the
By the
Hox. A. KINNAIRD, M.P., Chairman.
PAID-UP CAPITAL AND RESERVE FUND 2180,000.
ANNUAL INCOME, 2300,000.

Apply to the Clerks at the Railway Stations, the Local Agents, or—
64, CORNHILL, and 10, REGENT STREET, LONDON.
WILLIAM J. VIAN, Secretary.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the ROSEWARNE UNITED MINING COMPANY.—The Registrar of this Court has appointed SATURDAY, the 8th day of April next, at Eleven o'clock in the forenon, at the Registrar's Office. in Truco, TO SETTLE THE LIST OF CONTRIBUTORIES of the above-named company, now made out and deposited at the said office.

Dated Registrar's Office, Truco, March 28, 1876.

PRELIMINARY ADVERTISEMENT.

BURROW AND BUTSON LEAD, BLENDE, AND COPPER MINES (ST. AGNES, CORNWALL).

MINES (SI. AGNES, CORNWALL).

THE LEASE, MACHINERY, PLANT, &c., WILL BE SOLD.

by MR. JAMES GRIPE, as a going concern, in One Lot, BY PUBLIC
AUCTION, at the Mines, on Saturday, the 29th April, 1876, by order of the
Mortgagee. fortgagee. Further particulars will be duly announced.—March, 1876.

IN THE MATTER OF THE COMPANIES ACTS, 1862 AND 1867,

AND
IN THE MATTER OF THE PHŒNIX SILVER-LEAD MINING COMPANY

(LIMITED). PENHALE AND WHEAL GOLDEN SILVER-LEAD MINES. PERRANZABULOE, CORNWALL.

MESSRS. HANCOCK AND SONS are favoured with instructions to SELL, BY PUBLIC AUCTION, on Tuesday, the 4th day of April, 1876, at Eleven o'clock A.M. precisely, on the Mines, in One Lot, as a going concern (ambject to such conditions as will be then produced), all those MINES known

PENHALE AND WHEAL GOLDEN.

PENHALE AND WHEAL GOLDEN,

Stimate in the parish of Perranzabulce, in the county of Cornwall, together with
the WHOLE of the VALUABLE MACHINERY and MATERIALS thereon.
Particulars of the leases under which the setts are held may be known by the
undermeutions solicitors or liquidators. If not sold in one lot, each sett will lie
offered separately, with its respective machinery and materials. Should no sale
be effected to both or either of the setts as going concerns, the whole of the machinery and materials on the sett or setts unsold will be at once sold in lots as numbered, catalogues of which may be had post free five days prior to the day of sale,
of the auctioner or of the liquidator.
The MACHINERY and MATERIALS comprise — A 60 in, cylinder numping
ENGINE, with two double tube boilers; a 42 in, cylinder pumping ENGINE,
with one 11 ton boiler; a 24 in, cylinder winding EXGINE, nearly new, with
capstan and one 10 ton boiler; a 24 in, Cornish crusher, a 60 ft, and a 50 ft, siears,
3 arm capstan, a 14 in, capstan rope 180 fms, long, a 11 in, ditto 90 fms, long, 3 in,
steel wire rope 250 fms, long, balance bobs, a 8 ton weighbridge by Bartlett and
Son, 17-18 in pumps with plunger bottom complete, other 12 in., 13 in, and 9 in,
pitwork, 250 fms, ½ in, capstan chain, 13 ft, water wheel 4 ft, breast, with doubleacting plunger, with 4 in, and 6 in, iron pipes connected for about a mile, and the
usual plant, machinery, materials, and stores used in a well-found and extensive
mine.

The above are on the surface.

mine.

The above are on the surface.

The following materials are underground, and are to be sold in such manner as will be arranged at the sale, viz.:—three 30 fms. 18 in. plunger lifts, one 30 fm. 12 in. ditto, one 16 fm. 12 in. ditto, one 16 fm. 17 in. drawing lift, two 10 fm. 12 in. ditto, two 20 fm. 12 in. ditto, one 16 fm. 17 in. drawing lift, two 10 fm. 12 in. ditto, two 20 fm. 12 in. ditto, with main buckets, rods, ladders, casings and dividings, &c.

To view apply to the agent on the mine, and for further particulars to, Messrs.

MILLER and SMITH, Solicitors, 3, Salter's Hall-court, Cannon-street, London; ALEX, KBLUY, Eaq., Solicitor, Great Winchester street, London; FRED, WARWICK, Esq., the Liquidator of the said Company, 25, Bucklersbury, London, and 20, York street, Swansea; or to Messrs. Hancock and Sons, the Auctioneers, St. Austell, Cornwall. Austell, Cornwall.

Dated Royal Exchange Assurance Office, Sidney place, St. Austell, March 21st, 1876.

SHARES IN A CELEBRATED MINING PROPERTY

TIO DESCUENDED OF A MINING PROPERTY IN CHILI,

TIELDING LARGE PROFITS, FOR SALE.

TO BE SOLD, BY AUCTION, at the Mart. Tokenhouse-yard, in the City of London, on Tuesday, the 23rd day of May, 1876, at Two o'clock precisely, by Messus, DRIVER, in One or more Lots,

THREE SHARES (in Chili designated Barras) in the CARRIZALILLO MINING COMPANY. The company is divided into 24 shares only.

The CARRIZALILLO COMPANY own the celebrated DESCUBRIDORA MINB, and the three adjoining setts of SAN JUAN, CANCHAS, and SAN FRANCISCO, which are all worked under one administration, and are situate about thirty-three miles from the Pert of Pan de Azuar, from whence there is a good road.

CISCO, which are all worked under one administration, and are situate about thirty-three miles from the Pert of Pan de Azucar, from whence there is a good road.

The DESCURIDORA MINE has been working since 1858, and has yielded large profits. There are two steam-engines at work, one of 20-horse power and one of 8-horse power, for drawing, and there is also a newly-erected powerful engine, with Blake's crusher attached; by the use of the latter the company is enabled to dress and return the large accumulation of low-produce ore, which will now give a considerable profit. The mine is in thorough working order, and well stocked with materials, rails, jiggers, crushers, &c.

The adjoining setts of Ban J UAN, CANCHAS, and SAN FRANCISCO were acquired for the purpose of securing the ground around the Descubridora Mine, and they have since been worked on a limited scrle. There is also a shop, which supplies the workpeople, and also horses, cart, and mules.

Also the YEGA WASHING AND JIGGING ESTABLISIMENT, with yards, houses, shep, and stores, about nine miles from Descubridora (a tramroad is being aid down from the mine, which will greatly lessen the costs of carriage to the Vega). There are also dwelling-houses, bake-house, yards, store-rooms, ore-floors, and mole at Pan-de Aucar, with convenient launches for use in loading ships with the ore; and there is also belonging to the company a quinchique establishment, a watering place, situate about eleven miles from Pan-de-Aucar, on the road to Descubridora, with dwelling-house, shop, store, mule yard, water carts, mules, and harness; and in Chanzal Port a dwelling-house of eight rooms, and spacious ballony and store below, with good counting house.

The company also have at Chanzal other house of eight rooms, and spacious ballony and store below, with good counting house.

The company also have at Chanzal other house of eight rooms, and spacious ballony and store below, with good counting house.

The company also have at Chanzal other house of have a few property of comp

CHROMATE OF IRON FOR SALE.

CHROMATE OF IRON FOR SALE.

TO BE EXPOSED TO SALE, BY PUBLIC ROUP, within Dowell's Rooms, No. 18, George-street, Edinburgh, on Wednesday, the 7th June, 1876, at Two o'clock in the afternoon, the WHOLE MINERALS (including Chromate of Iron) in the COMMONTIES of (1) HAROLDSWICK and (2) BALLASTA, in the Island of UNST, SHETLAND.

The Chromate of Iron in these extensive Commonities has been profitably worked since the beginning of the present century, and the supply is believed to be enormous, if not inexhaustide. The Minerals belong to several parties pro indiviso, and are also being sold under actions of division and sale presently depending in the Court of Session. The upset prices have been fixed by parties appointed by the Court in the said actions, after making borings over a comparatively limited portion of the area embraced in the Commonties.

Full particulars will be furnished in Unst by Mr. D. C. Edmonston, at Ordale; or W. G. MOUAT, at Baltasound; in Lerwick, by Mr. WW. SIEWMRGHT, Solicitor; and in Edinburgh by Mesers. SIVANY and CHEYNE, W. S., 56, Frederick-street, with whom are the Articles of Roup, Plans, and Reports.

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(LIMITED).

TO BE SOLD, BY PRIVATE TREATY, ALL the BENEFICIAL INTEREST of the New Llangynog Lead Mining Company (Limited) in the LLANGYNOG LEAD MINES, comprising all the valuable, productive, and extensive mines, veins, beds of lead, ores of lead, and other metals and minerals known collectively as the Llangynog Lead Mines, and in the reservoir, water-apply rights, easements, and interests thereto belonging, situate in the several parishes of Llangynog, Llanrhaiadr-yn-Mochnant, Hirnant, and Pennant, in the county of Montgomery; and also the WHOLE of the movable PLANT and MACHINERY of the said company.

The Llangynog Lead Mines have been a highly productive and dividend-paying property.

The Liangynog Lead Mines have been a nignty productive and divided paying property.

The mines, machinery, and plant are in working order, and considerable quantities of ore are now being raised.

The works may be inspected at any time upon application to the Manager at the Mines. The leases and agreements may be inspected at the offices of Messrs. Longueville, Jones, and Williams.

All further information may be obtained, and maps of the property inspected on application to Messrs. Geo. Hawrell and Sons, 84, Foregate-street, Chester to Henry Dennis, Esq., Mining Engineer, Hafod-y-Bwch, Ruabon; or to Messrs Longueville, Jones, and Williams, Solicitors, Oswestry.

TO CAPITALISTS OR PROMOTERS DESIRING TO MAKE MONEY.

TO BE SOLD, a COLLIERY ROYALTY in NORTH WALES,

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nay be 88 feet thick.

Present holder will arrange to sell the entire to an individual or company for what it has cost him, dividing all profit made above, which, even in a normal state if the coal trade, must be large. Certain and safe surveys by eminent Stafford-hire and Welsh engineers have already been made.

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20 ft. long by 5 ft. 6 in. diameter, steam chest, &c.; plates ½ in. thick, B.B.H. ôft. long by ôft. 6 in. diameter, steam chest, &c.; plates ½ in. thick, B.B.H. loomfield feet.
EDGE RUNNER MILL, with REVOLVING PAN, lined with stone, and

stone runners.
SMALL STEAM ENGINES, &c.

ELLACOTT AND SON, ENGINEERS,
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Pice for the lot as they stand, £480.

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A 40 in. CORNISH BEAM PUMPING ENGINE, 9 ft. stroke in cylinder, and 7 ft. in shaft (by Perran Foundry Company), in good condition. THREE 30 ft. by 6 ft. 6 in. SINGLE FLUED BOILERS, with all fittings complete—one of the above nearly new.

ONE 12 in. cylinder HORIZONTAL SPEAM CAPSTAN, with drawing gear and drum complete, is equal to new.

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ONE 50 in. cylinder CORNISH PUMPING ENGINE, 10 ft. stroke in cylinder ownthout TWO BOILERS of 10 tons each.

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WHEELS,
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HEELS.
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ONE 22 in. cylinder ROTARY ENGINE, 6 ft. stroke, with PUMPING GEAR

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Price One Shilling.

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THIRD EDITION.

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This day is published, price 1s. 6d.,

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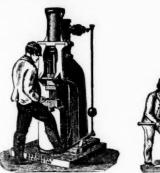
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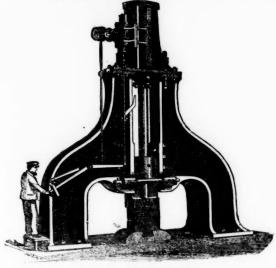
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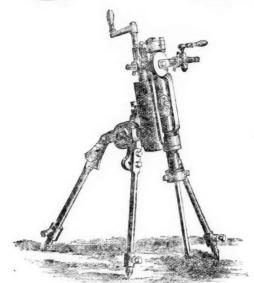
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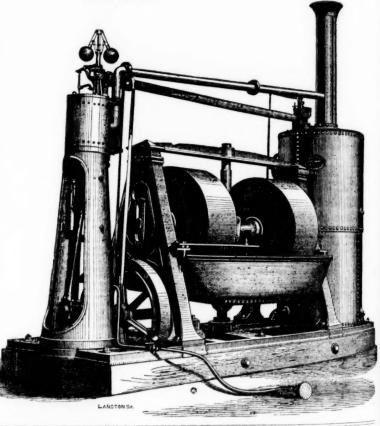
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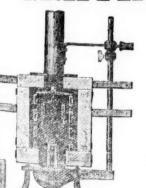
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1	100 Ashbury Co. [L.] 10 Bagnall, John, and Sons [L.] 10 Benhar Coal Co. [L.] 10 Bilbao Iron Ore Co. [L.] 10 Bilbao Iron Ore Co. [L.]	50	0 0	Pa	
1	10 Benhar Coal Co. [L.]	10	0 0,		
1	50 Bilbao Iron Ore Co. [L.]  10 Bilson & Crump Meadow Coll. Co.[L.]  4 Blaen Gwmbach Coal Co. [L.]  50 Blaenaton Iron and Steel Co. [L.]  50 Bowling Iron Co. [L.]  60 Bowling Iron Co. [L.]  50 Britannia Ironworks [L.]  50 Brown, Balley, and Dixon [L.]  100 Brown, John, and Co. [L.]	50	0 0		1
1	Blaen Cymbach Coal Co. [L.]	]10	0 0		-1
	50 Blaenavon Iron and Steel Co. [L.]	50	0 0		. 1
1	50 Bowling Iron Co. [L.]A	35	0 0		
1	50 Britannia Ironworks [L.]	50	0 0		149
1	50 Brown, Bailey, and Dixon [L.]	40	0 0		-
١	& Cakemore Colliery Co. [L.]	70	0 0	. 3	2
1	100 Cammell and Co. [L.]	0	0.0		. 1
1		80	0 0	EX.	9
1	10 Cardiff & Swansea St. Coal Co. [L.]. 10 Cardigan Steel and Wire Co. [L.]. 10 Central Swedish Iron and Steel [L.]. 5 Chapel House Collison	8			
1	10 Central Swedish Iron and Steel [L.].	10			
1	5 Chapel House Colliery	5		1	1
١	50 Chatterley Iron Co. [L.]	40	0 0	29	21
1	10 Chillington Iron Co. [L.]	10	0 0		18
1	1 Clee Hill Colliery Co. [L.]	1	0 0	*%	4%
ı	1 Consett Spanish Ore [L.]	7	10 0	19 x	34 0
ı	50 Cooke, William, and Co. [L.]	30	0 0	24	2
1	20 Darlington Iron Co. [L.] 50 Davy Brothers [L.]	1	0.0		
1	5 Diamond Fuel Co. [L.]	22			11
1	82 Ebbw Vale Co. [L.]	29	0 0		14
1	10 General Mining Ass. [L.] (£1 returned 20 Great Western Coai Co. [L.]	) 9		4	10
1	2 Gwyngwillim Colliery Co. [L.]	2	0 0		1 .
	52 EDDW VAIC CO. [L.]	10	0 0	7	-
Į	10 Ifton Rhyn Colliery Co. [L.] 50 Knowles, Andrew, and Sons [L.] 10 Llay Hall Coal, Iron, & Firebrick [L.]	10	0 0	9%	6%
I	10 Llay Hall Coal, Iron, & Firebrick [L.]	17	0 0	6	64
1	5 Littledean Woodside Coll. Co. [L.] 50 Llynvi, Ogmore, & Tondu Co. [L.] 10 Lydney and Wigpool Iron Ore [L.]	5	0 0		-"
1	10 Lydney and Wigpool Iron Ore [L.]	80	0.0	27	30
1	to marbeila from Ore Co. [12.]	10	0.0	8	
I	6 Mersey Steel and Iron Co. [L.] 10 Midland Iron Co. [L.]	5	0.0	6%	61/4
1	10 Midland Iron Co. [L.]  8 Mold Argoed Colliery Co. [L.]  10 Monkland Iron and Coal Co. [L.]	5	0 0	234	14
I	10 Monkland Iron and Coal Co. [L.]	10	0 0	8	-
ı	• Mwyndy from Ore [15.]	8	10 0	3	IN IN
1	100 Nant-y-Glo and Blaina (8 p.e. pref.)  1 Nerbudda Coal and Iron	0	0 0	30	35
ł	20 New Sharlston Collieries [L.] Pref	20	8 0	Dar 16	15
1	10 Newport Abercarn Coal Co. [L.] 10 Northmptn. Coal, Iron & Wagon [L.]	8	0 0		20
ı	20 New Sharlston Collieries [L.] Pref 10 Newport Abercarn Coal Co. [L.]. 10 Northmptn. Coal, Iron & Wagon [L.] 10 Northfield Iron Co. [L.]. 1 Norton Green Coal Co. [L.]	8	0 0	8	
1	1 Norton Green Coal Co. [L]	1	0 0		18
I	35 Palmer's Shipbuilding and Iron [L.] 100 Parkgate Iron Co. [L.]	25 65	0 0	1314	114
1	20 Patent Nut and Bolt Co. [L.]	14		6%	HA TA
1	20 Pelsail Coal and Irou . 1.]	10 15	0 0		-
ı	50 Phœnix Bessemer Co. [ G.]	40	0 0	4%	14
1	80 Rhymney Iron Co. [L.]	80	0 0,	26	28
1	100 Samuel Fox and Co. [L.]	80 100	0 0	26	27
ı	50 Ditto New	10	0 0		-
١	50 Shotts Iron Co. [L.]	50 55	0 0	14	15
1	50 Silkstone & Dodworth Cl. & Iron[L.]	22	0 0	16%	17
1	5 Silkstone Fall Colliery Co. [L.]	ā	0 0		-
1	80 Semerrostro Iron Co. L.	20 50	0 0		-
-	100 Staveley Iron and Coal [L.]	17	0 0		:
İ	100 Staveley Iron and Coal Co. [L.]	10	0 0	44	11 1
ı		20	0 0	8	14
-	10 Swansea Valley Steam Coll. Co. [L.].	6	0 0		
1	100 Thames Iron Company	100	0 0		
1	25 Ditto D. shares	25	0 0	2	1
ı	20 Ulverston arming co. [11.]	12	0 0	11/4	1
1	10 Vancouver Coal L.	6	0 0	114	-
l	100 Vickers, Sons, & Co. [L.] 6 p. c. deb. 1	00	0 0	1/4	12
ı		50	0 0		
l	25 W. Cumberland I. and Steel [L.] 10 West Mostyn Coal [L.] (12 p.c.pref.)	20	0 0	1	1
ı	0 11 200	8	0 0		-
l	10 Whitehaven Iron Co. [L.]	10	0 0		-
l	100 Wigan Coal and Iron Go. [L.]	78	0 0		:
l					
1					
1	*********		-		
I	WAGON COMPAN	IE	S.		9
l	10 Birmingham Wagon Co. [L.]	10	0 0	21	뫮
l	10 Birmingham Wagon Co. [L.] 20 British Wagon Co. [L.]	15	0 0	816	1
1	10 Yorkshire Wagon Co. [L.]	10	0 0	3	À
1					
1					
1	TELEGRAPH COMP.	AN	TEG		
1				mv i	10
1	'8t." Anglo-American	10	0 0	核	1
	20 Direct United States Cable	20	0 0	1	18
1	10 East Exten. Australia and China		0 0	616	转指
1	10 Great Northern 25 Indo-European	10	0 0	8	梅
1	zo indo-European	20	0 0	11 1	22

	TELEGRAPH COM	PAN	H	3.		
	Anglo-American		0	0	6314	60
10	Brazilian Submarine	10	0	0	11	1
20	Direct United States Cable	20	0	0	1	13
10	Eastern	10	0	0	5%	84
	East. Exten., Australia and China		0	0	6%	75
10	Great Northern	10				捐
25	Indo-European	25				2
10	Mediterranean Extension				21/6	
8	Reuters	8				
Btk.	Submarine	100	0	0	100	200
10	West India and Panama	10	0	0	1	腸
20	Western and Brazilian	20	0	0	61/4	13
<b>R1000</b>	Western Union 7 percent, Mort. Bon	ds 81	100	01	08	138

	MISCELLANEO	)US		
Stk.	Atlantic and Great Western Leased			
Ota.	Lines, Rental Trust		0 0	40 6
25	Austral, Mort. Land and Finance [L.		0 0	31/4
	Australian Agricultural		10 0	
	Avonside Engine [L.]		0 0	4 1
Stk	Baltimore and Ohio, 6 per cent	100	0 01	10% 111
	Cent. of New Jersey Con. Mort			
Stir	Cent. Cacific of Calif., 1st Mort. 6 p.c.		0 0	98 H
	City of London Real Property [L.]		0 0	1/4 dis
	Copper Miners of Eng. (7 p. c. p. ef.)		0 0	4 4
	Credit Foncier of England [L.]		0 0	1%
	Diamond Rock Boring		10 0	
15	English and Foreign Credit	8	0 0	
15	Foster, Porter, and Co. [L.]	10	10 0	10 11
6	Gen. Phos. & Chem. Works Co. [L.]	6	0 0	-
ĩ		1	0 0	19 19
	Hudson's Bay Company	17	0 0	
10	Huntington Copper and Sul. Co	9	0 0	
Stk.	Illinois Central, \$100 shares	100	0 0	DE 18
Btk.	Illinois & St. Louis Bridge, 1st Mort.	100	0 0	
Btk.	Ditto, 2nd Mort., 7 per cent	100	0 0	
Stk.	Illinois Cent. Sinking Fund, 5 p. cent.	100	0 01	
Stk.	Ditto, 6 per cent	100		10 1
736	Imperial Credit [L.]	7	10 0	1 8
-	Ditto, Surplus Certificate	100	0 01	ns 10
	Lehigh Val. Con. Mort., A, 6. p. cent.	100	0 0	11 1
	Milner's Safe [L.]	8	0 0	81/ 8
25	National Discount [L.]		0 0	
Btk.	N. Cent. Rail. Con. Mort., 6 per cent.	5	0 0	
5	Patent Gunpowder Company		00.1	06% 期
8tk.	Pennsyl. Gen. Mort. 6 p. cent., 1910.	100	0 01	101 16
Btk.	Ditto, Con. Sink. Fund, 6 p. ct., 1905	50	0 0	
50	Peninsular and Oriental Steam	- 0	0 0	5
	Silber Light (ord. sh.)	00	0 0	29 8
20	Buez Canal shares	-	0 0	21 7
12	Telegraph Construc. & Mainte. [L.]		0 0	216 3
5	Ditto, Second Bonus Three per Cents		0 0	21%
10	Tharsis Sulphur and Copper Co Union Pacific Land Grant, 1st Mort.		0 0	89
Btk.	Union Pacific Railway, 1st Mort		0 0	94
BIK.	Union Facine Manway, 150 More		-	

b, blende; el, coal; e, copper; g, gold; l, lead; s, silver; kins: s, sine.

\* Limited Liability Companies; t quoted on the Steek Indee

T have paid dividends.

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